AXALTA

AXALTA COATING SYSTEMS OPERATING PROCEDURE

TITLE: LIQUID CONTAINMENT AND DISPOSAL

DATE OF ISSUE: 08/31/04

PREPARED BY: R. HAEFNER
REVIEWER: S.LANDIS
APPROVER: S.LANDIS

PROCESS ENG: S.LOPER
EHS RESOURCE: R.J. MAIER

ATTACHMENTS INCLUDED: NONE

REASON FOR REVISION: NORMAL REVIEW,
3/25/08 (R. HAEFNER) - 2 YEAR REVIEW - CHANGE FROM PLT_A014 TO A MT CLEMENS AOP.
NEW AOP. REVISED FROM MT. CLEMENS AOP TFM_A010

03/25/08 - (R. HAEFNER) CHANGE TO MT CLEMENS PROCEDURE SYSTEM
2/10 (T.ALEXANDER) -PROFILE AND COVERPAGE UPDATED
4/10 (T.ALEXANDER)- 2 YEAR REVIEW- added site safety and environmental controls and MSDS link
4/2012- (T. ALEXANDER) -2 YEAR REVIEW - NO CHANGES
7/2014 (T.ALEXANDER) out for review-updated cover page
10/2014 (R.Maier) - Changes throughout procedure

PURPOSE: PROVIDE CLEAR INSTRUCTIONS FOR PROPERLY DISPOSING OF LIQUIDS FROM CONTAINMENT AREAS.

SPECIAL P.P.E. / TOOLS REQUIRED: SAFETY GLASSES WITH SIDE SHIELDS, ESD SAFETY SHOES, NOMEX CLOTHING, SYNTHETIC GLOVES.

LEGEND:

= **CRITICAL PROCESS STEP**

= **SAFETY CAUTION**

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I. P.P.E. & ADDITIONAL EQUIPMENT REQUIRED

P.P.E.:

1. Safety Glasses with side shields
2. Safety Shoes
3. Nomex Clothing
4. Synthetic Gloves

ADDITIONAL EQUIPMENT: None

II. OBJECTIVE:

This procedure provides clear instructions for PROPERLY removing all liquids either hazardous or non-hazardous from containment areas.

III. REQUIREMENTS:

This procedure is designed to comply with all environmental regulations and Axalta Coatings System policy.

IV. LOCATIONS:

a. North Tank Farm and West Tank Farm (above and below ground).

Secondary containments surround each tank farm and each loading & unloading station. The purpose is to provide containment in the event of a release from the tanks in the tank farm area or from the handling operations in the loading & unloading stations.

In the event of a spill or during a rain event, contaminants and/or water flow into a sump. If more than approximately 30 gallons of liquid enters a sump, that sump will overflow into the secondary containment. Each Sump has a sump pump that is manually controlled and that is piped to pump storm water to the sewer only when activated by an operator. Operators will visually inspect water for sheens before discharging the storm water. Monthly inspections forms are completed by site manager. Quarterly visual samples are taken and inspected by site manager. Annual comprehensive inspections are completed by site manager.

Toledo Plant Stormwater Annual

Toledo Plant Stormwater Monthly

Toledo Plant Stormwater Quarter

b. E-Building Tank Storage

The building has a concrete floor that is recessed approximately 1 ft. to provide the containment for the raw and semi-finished

material tanks. The floor has an attached trench system, with metal grates, that flows into a large sump outside the Administration Office Building. The trench drains have a baffle arrangement that also acts as a firetrap. Should a fire occur during a major spill the fire would be trapped on the liquid surface and the liquid would drain through the trench to the retention sump. A slide valve has been added in the fork truck isle that will prevent smaller amounts of liquid from leaving E-Bldg.

IV. LOCATIONS: NORTH TANK FARM (CON'T.)

If the sprinklers do go off and it is necessary to drain water from the building, the valve can be manually raised to let the water flow to the catch basin. Two hydrocarbon detectors are positioned near the trenches before it exits the building to the sump. If the detectors sense the presence of hydrocarbons at a level to be a hazard all movement of pumped liquids in the Plant will be interrupted. The retention sump has a large drain with a 90 degree elbow that points down, on the opposite end of the trench that allows the sump to be pre-charged with water to a level determined by the height of the drain. Material that is lighter than water would float on the surface with additional water sinking to the bottom and going to the drain. The stored fluid may be highly flammable and cleanup must proceed immediately. None of the material/stormwater mix would be recoverable and none would be discharged. The Environmental Coordinator must be contacted.

Under non-spill scenarios, storm water in the sumps simply flows through to the storm sewer without testing or visual inspection.

c. Resin Tank Wagon Loading:

Resin tank wagon loading building has a concrete floor that slopes toward a sump that would collect spills from overflowing wagons or leaking from below at valves or hoses. The sump has open grates on top with no drains or overflow to storm sewer. A hydrocarbon detector is positioned in the center of the building to monitor the source of any possible release of material. If the detector senses the presence of hydrocarbons at a level to be a hazard all movement of pumped liquids in the Plant will be interrupted. **None of the material/stormwater mix would be recoverable and none would be discharged. The Environmental Coordinator must be contacted.**

Water that is not contaminated will be discharged to the storm sewer, and contaminated water will be pumped into a drum or a tank truck depending on the quantity. All water will be visually assessed before discharged.

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IV. LOCATIONS: NORTH TANK FARM (CON'T.)

d. East and West Storm Sewer:

Hydrocarbon detectors are positioned in the sewers near the incoming water flow from the plant. If the detectors sense the presence of hydrocarbons at a level to be a hazard the system will alarm and notify the guard and ADT of the problem. The hydrocarbon detection system will also automatically close the outlet valve on the sewer blocking all flow from leaving the plant. A spill cart is located near the East Storm Sewer to aid in spill cleanup and recovery. A large electric pump cart, with hoses, is located on the near the back garage that can be used to pump the accumulated water and material. Water that is not contaminated will be discharged to the storm sewer, and contaminated water will be pumped into a drum or a tank truck depending on the quantity. All water will be visually assessed before discharged. The Site Supervisor or Plant Engineer will determine when to open the automatic valves after a spill following consultation with the Environmental Coordinator.

e. Cold Storage Building:

This building is currently used to store raw materials and a portion is used for < 90-day hazardous waste storage. The building has a trench along all four walls that will catch any small spill and keep it inside the building walls. The trench has metal grating on top and all of the grating can be removed to clean or pump at any point along the trench. No other drains or pipes are connected so all removal has to be done manually with a pump or spill clean-up equipment. No detection devices are installed so visual monitoring is done by all operators that perform weekly RCRA audits of the building. Any spill that is found, the operator must contact the Site Manager or Plant Engineer for spill clean-up instructions. If a spill has occurred, the Toledo Spill Cleanup and Agency Notification procedure, #TOL A004, must be followed.

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IV. SUMP HYDROCARBON DETECTORS:

a. The Hydrocarbon Detector sensors are mounted near the floor or above the maximum water line to keep the sensor as close as possible to any liquid entering the sump while still keeping them dry. If the sensor is submerged for any reason it will be damaged and must be replaced.

b. The detectors will alert a spill by alarming at the alarm panel in the resin hallway or at the guardhouse. The alarm at the guardhouse will be displayed as a "Hydro Carbon Detected" alarm and will go to ADT. The guard must contact the Site Supervisor or Plant Engineer or the Resin Reactor 7, Operator (at night after normal work hours) to determine the exact cause of the alarm. If a spill has occurred, the Toledo Spill Cleanup and Agency Notification procedure, #TOL A004, must be followed. The individual contacted would then acknowledge the alarm at the alarm panel.

c. The hydrocarbon detectors are reset at the respective alarm panel. After a spill has been cleaned up, traces of hydrocarbon may still be picked-up by the detectors. Continue clean up operations until the reset button shuts off all alarms.

d. If any problems are encountered with the operation or calibration of the hydrocarbon detectors plant maintenance should be called for assistance.

V. INSPECTION – LAB AREA PUMPER:

a. Lab area pumper will audit sumps on a daily basis for potential leaks and product releases.

b. Visually check each containment area for leaks from tanks, pumps, or pipes. Look for visible signs of solvents on the surface of the water in the sump (a "sheen").

c. A "sheen" would normally indicate that a leak is present or a spill has occurred. Check the plant list of liquids that are miscible in water to know what liquids may not produce a "sheen" because they are miscible in water. If a leak has occurred, alert the Site Supervisor. The Site supervisor will assess the situation and if needed activate the Spill Response Procedure, #TOL_A004.

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VI. STORM WATER MANAGEMENT:

a. UNCONTAMINATED STORM WATER

1. **IT IS IMPORTANT TO IMMEDIATELY REMOVE THE UNCONTAMINATED WATER IN THE RETENTION BASIN ONCE THE TEST RESULTS ARE IN.**

2. All non-contaminated water will be discharged to the storm sewer as soon as possible.

b. CONTAMINATED STORM WATER

1. If, upon inspection, a pump leak or release is suspected, sample and analyze the water then contact the Site Supervisor or Plant Engineer.

2. Contact Maintenance to repair leak.

3. Make sure that all leaks are fixed or sealed off.

4. Site manager or his designate will work with the operator to pump contaminated water into proper storage container for disposal. Large volume releases may require assistance and an authorized contract cleanup company will be contacted. The Environmental Coordinator must be contacted in the event that a contract cleanup company is required.

5. Reset the hydrocarbon alarm. If hydrocarbons are still present, the alarm will stay on and the sump may require additional cleaning.

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MSDS for any hazardous material(s) used in this procedure are available via computer.

SOC & Design Basis Database
Safety and Environmental Controls

MERCURY CONTROL PLAN

DATE OF ISSUE: 10/2009

NEXT REVIEW: 10/2015
REVIEW FREQUENCY: 3 YR

PREPARED BY: R. SCHMITZ

REVISED BY: R. SCHMITZ

REVIEWER:

APPROVER: R.J. MAIER

PROCESS ENG:

EH&S RESOURCE:

ATTACHMENTS INCLUDED: Attachment #1 - Label for equipment or instruments known to contain mercury.

PURPOSE: This plan provides requirements for the Mt Clemens and Toledo Mercury Control Plan and gives guidance for handling, response to spills, spill clean up and disposal of mercury, mercury compounds and mercury containing equipment.

SPECIAL P.P.E. / TOOLS REQUIRED: Determination needs to be made depending on the circumstance if respiratory protection, disposable coveralls and shoe covers are needed. At a minimum: safety glasses, synthetic gloves and a disposable lab coat are required.

LEGEND:

= CRITICAL PROCESS STEP

= SAFETY CAUTION

REASON FOR REVISION:
NEW AOP

10/2012 - 3 YEAR REVIEW
10/2012 - (R.MAIER) PHONE NUMBER CHANGE
8/2013 (C. MEAKEM) - SCRUBBED DUPONT FROM PROCEDURE ONLY

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I. RESPONSIBILITY

It is the responsibility of all members of the plants to comply with the activities, documented procedures and work instructions defined within the stated scope of the area of the Axalta Coating Systems Plant in Mt. Clemens, Michigan and Toledo, Ohio. It is also the responsibility of the user to identify any part of the procedure that the user feels may be incorrect. Users are expected not to deviate from this procedure, (except in emergency situations), until the proposed change or changes has or have been documented, reviewed, approved and the users have been instructed in the change. No hand written changes to this procedure are permitted.

II. P.P.E. & ADDITIONAL EQUIPMENT REQUIRED

For S-2 and S-3

1. Leather Gloves ☒
2. Face Shield ☐
3. Safety Glasses with side shields ☒
4. Synthetic Gloves ☒
5. Respirator or PAPR ☒
6. Splash Goggles ☒
7. Nomex Clothing ☐
8. ESD Safety Shoes ☐
9. Synthetic Apron ☒
10. Hearing Protection ☐

For S-5 and S-6

1. Fresh Air supply ☒
2. Synthetic Raincoat ☒
3. Synthetic Boots ☒

For S-4 and for loading MS1 materials

1. Tyvek Coverall ☒

ADDITIONAL EQUIPMENT: Shoe covering as appropriate

III. SCOPE

1. This procedure provides the requirements for the Mt Clemens and Toledo Mercury Control Plan and gives recommendations for storage, handling, spill cleanup, emergency response to spills, and disposal of mercury, mercury compounds, (specifically elemental and inorganic mercury) and mercury-containing equipments Mercury Containing Equipment (MCE).

   This program does not cover organic mercury which is also toxic. Handling or use of organic mercury shall only be done after detailed review of its health effects and recommended protective measures. Refer to PLT_A008 Authorization for Purchase and Use of New Chemicals or raw material Packages at Mt Clemens.

IV. Purpose

Mercury is a potentially dangerous, biological and environmental accumulative element.

The purpose of this procedure is to identify potential hazards, provide guidance in handling, use, storage, spill prevention, spill clean up, waste management and training and identify the regulatory requirements for mercury and mercury compounds.

This procedure provides guidance in protecting employee health and the environment while meeting the applicable regulatory requirements covering mercury exposure limits and waste handling. It does not replace an MSDS or other guidance documents specific to the chemicals and activities involved. PPE selection will require an informed evaluation of the materials and activities.

V. Responsibilities

1. **Line management** has the responsibility to implement this standard.

2. **Employees**

   A. Shall not handle mercury, mercury compounds and MCE unless there has been training and direction for proper precautions and PPE to prevent exposure to personnel and the environment.

   B. ***In the event of extreme need, prior to any purchase of MCE, the site EHS resources shall be contacted.***

   C. Using mercury or mercury containing equipment needs to be avoided. Consider alternative instruments that would contain minimal or no mercury, i.e., alcohol or digital thermometers and aneroid barometers, to measure temperature or pressure.

   D. Emergency responders need to wear PPE appropriate for the situation to which they are responding. The determination is made with an informed assessment using Haz Mat protocols and utilizing EHS resources.

   E. Mercury-containing waste will be packaged, labeled and disposed of according to regulations.

   F. Because of their mercury content, certain lamps and batteries must be handled as hazardous waste. Disposal costs should be considered in purchasing decisions.

VI. Background/Definitions

Handling mercury - manipulation of mercury or mercury compounds in open or closed containers.

Mercury is a chemical (element) that occurs naturally in the environment in several forms. In the metallic or elemental form, mercury is a shiny, silver-white, odorless liquid with a metallic taste. Mercury can also combine with other elements, such as chlorine, carbon, or oxygen, to form **mercury compounds**. These compounds are called ***"organic mercury"*** *if they contain carbon*, and **"inorganic mercury"** if they do not. In pure form, these mercury compounds are usually white powders or crystals. All forms of mercury are considered toxic.

Mercury-containing equipment (MCE) - devices, items or articles that contain varying amounts of elemental mercury that are integral to their functions, including several types of instruments used throughout the electric utility industry and other industries, municipalities, and households. Some commonly recognized devices are thermostats, barometers, manometers, and mercury switches.

VII. Health Hazards and Physical Properties

Physical Form	Dense liquid at temperatures above -38.83 C (-37.89 F) and below 356.73 C (674.11 F)
Appearance	Shiny, silvery-white liquid and colorless vapor
Odor	No odor
Molecular Weight	200.59 g/mol
Specific Gravity	13.595 g/mL at 0 C
Surface Tension	480 dynes/com at 20 C
Vapor Pressure	0.002 mm Hg (0.266 Pa)
Solubility in Water	Immiscible in water

**Mercury has a low vapor pressure. If it is left uncovered, room temperature mercury in areas with poor ventilation can result in unacceptable levels of mercury in the air.

Toxicology

All forms of mercury are toxic, even in small amounts. Its effect is cumulative and not readily reversible. Metallic

mercury and mercury compounds can enter the body through inhalation, ingestion, or absorption through the skin. All forms of mercury can adversely affect the central nervous system, kidneys, gastrointestinal tract, respiratory tract, and eyes.

Mercury poisoning from chronic inhalation produces a variety of symptoms. The characteristic effects are emotional disturbances, unsteadiness, inflammation of the mouth and gums, general fatigue, memory loss, and headaches. In most cases of mercury exposure by chronic inhalation, the symptoms of poisoning usually disappear when the source of exposure is removed; however, improvement may be slow, and complete recovery may take years.

Skin contact with mercury compounds produces irritation and various degrees of chemical burning (i.e., corrosion). Absorption through the skin may be strong enough to cause mercury poisoning.

VIII. Handling/Storage

A. Mercury and mercury compounds are not stored or handled on site.

B. **In the event there is a need for purchasing, storage and/or handling of mercury or mercury compounds, EHS resources shall be contacted.** A hazard assessment with a review of PPE, handling (open or closed container), labeling, exposure monitoring, ventilation, employee training etc. would need to be initiated.

C. Mercury in the event is approved shall be stored in closed, air tight containers made of stainless steel and have screw caps. Containers shall be stored in secondary containers with smooth, nonporous surfaces in well ventilated and cool areas.

IX. Mercury containing equipment (MCE)

A. Mercury-containing lamps and bulbs should be stored in the original containers and according to manufacturer recommendations. They need to be stored in a way to prevent breakage.

B. **Use of mercury thermometers should be discontinued and replaced with non-mercury containing thermometers.** If there is extreme need to use a mercury containing thermometer, there are thermometers available that have coatings or coverings that prevent shattering and release of the mercury.

C. Instruments or equipment known to contain mercury (i.e. manometers, switches, thermostats) need to be labeled indicating it is MCE.

D. Purchasing personnel and maintenance planners need to have awareness for avoiding the purchase of MCE.

X. Training

Site general awareness should be completed initially and then at intervals of at least every three years. Awareness communication should include appropriate mercury hazard information, proper handling precautions, PPE, response and disposal practices.

XI. Emergency Procedures in the event of a spill.

A. Immediately notify the Hazmat team for direction. No amount of mercury spilled can be assumed non hazardous. Respiratory protection needs to be considered and provided for cleanup of all spills because even very small amounts of mercury can result in airborne concentrations in excess of exposure limits. Reference AOP #PLT_A003 Spill Clean-Up.

B. Hazmat team will refer to MSDS and EHS resources as necessary for selection of appropriate PPE. For minor spills, < 1gram or the amount in a small glass fever thermometer, depending on room ventilation and room temperature, a disposable lab coat, safety glasses and synthetic gloves may be sufficient. If mercury is on the floor, shoe covering is necessary.

C. Due to the nature of mercury and the increased scrutiny to incidents that involve mercury, contact the Environmental Coordinator (9323 or Nextel) prior to performing clean up and/or clearance sampling.

D. For spills >1 gram (approximate amount in a small glass fever thermometer) a contract clean up company will be called for the clean up and clearance sampling.

E. Use the eyewash and/or safety shower if mercury has contacted the eyes or skin.

F. Stay in the most immediate well ventilated area and wait for the Haz Mat team to determine if clothing and shoes are contaminated and would need to be removed.

G. Barricade the area to prevent the spread of any spilled mercury.

H. Consult with Emergency First Responders and/or Medical regarding any medical follow up that may be determined necessary.

The Hazmat team has the responsibility for releasing the affected area(s) for completion of clean up and general use.

Hazmat team should keep mercury spill kits available on site. The kits should be used according to manufacturer's directions.

A. Pools or droplets of mercury should be pushed together and then collected by suction with a vacuum source and a collecting trap. Ordinary vacuums and brooms are never to be used to clean up mercury.

B. After the gross contamination has been removed, follow manufacturer's direction for use of the mercury spill kit.

C. Place the waste from the spill kit in a sealed container for disposal. The recovered mercury needs to be sealed in a vapor proof, non porous container.

D. Anything used for clean up need to be placed in a trash bag then double bagged.

E. Prior to clearance of the spill area, a visual inspection using a flashlight needs to be completed. Visually examine surfaces and crevices for droplets of mercury (shiny, silver droplets).

F. To determine the boundaries of a spill area or to perform an airborne vapor test, the clean up company may need a Jerome Mercury analyzer. Acceptable clearance levels are 0.003mg/m3 for surface and airborne vapor testing. Document any testing and these records need to be maintained with the Hazmat incident records and with the Occupational Health files.

The analyzer is available for rental at Argus-Hazco - located at 46400 Continental Drive, Chesterfield, Mi 48047. 586-840-3200
Website information:
http://argus-hazco.com/gas-section/single-gas-monitors/jerome-431-431xd-mercury-vapor-analyzer.htm

XII. Waste Disposal

The Resource, Conservation and Recovery Act (RCRA) classifies mercury as a toxic material and it must be reclaimed or disposed of accordingly. Any Mercury-containing waste needs to be packaged, labeled and disposed of according to regulations

A. ***The Environmental Coordinator (9323or Nextel) needs to be contacted for proper disposal of any mercury from a spill or disposal of any mercury containing equipment.***

B. Mercury waste or MCE needs to be placed in a tightly covered, non porous vapor proof container.

C. Mercury or mercury compounds must never be poured or flushed down the drain, or allowed to vaporize into a fume hood or into the atmosphere.

D. Because of their mercury content certain lamps and batteries must be handled as hazardous waste. Disposal costs should be considered in purchasing decisions.

E. All mercury and mercury-containing equipment should be labeled (attachment #1) and brought to the Environmental Coordinator (9323) or to site Waste Handlers (9903).

XIII. References

A. Axalta corporate standard S17T
B. Site AOP Spill Clean UP PLT_A003
C. OSHA/EPA Occupational Chemical database
http://www.osha.gov/web/dep/chemicaldata/default.asp#target
D. EPA 40 CFR 262
E. Michigan Dept. of Community Health

Attachment #1

MERCURY-CONTAINING EQUIPMENT

This equipment is known to contain mercury.
Prior to relocation and/or disposal please contact
Environmental Coordinator @ 9323

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MSDS for any hazardous material(s) used in this procedure are available via computer.

SOC & Design Basis Database

Safety and Environmental Controls

TITLE: ENVIRONMENTAL RELEASE AGENCY NOTIFICATION SYSTEM

DATE OF ISSUE:6/2002

PREPARED BY: **D. TRABBIC-POINTER**
REVIEWER: R.J. MAIER
APPROVER: R.J. MAIER

PROCESS ENG:
EHS RESOURCE:R. SCHMITZ

ATTACHMENTS INCLUDED: NOTIFICATION FLOWCHART

PURPOSE: TO OUTLINE THE PROCESS USED TO DETERMINE WHETHER A SPILL IS REPORTABLE AND TO DETAIL THE APPROPRIATE AGENCY THAT MUST RECEIVE THE REPORT.

SPECIAL P.P.E. / TOOLS REQUIRED: NONE.

LEGEND:

 **= CRITICAL PROCESS STEP**

= SAFETY CAUTION

REASON FOR REVISION: NEW AOP

6/23/04 (D. TRABBIC-POINTER) - 2 YEAR REVIEW - NO CHANGES

6/23/06 (D. TRABBIC-POINTER) - 2 YEAR REVIEW - NO CHANGES

6/2008 (D. TRABBIC-POINTER) - 2 YEAR REVIEW

6/2010 (B. VATH) - 2 YEAR REVIEW - (DTP) ADDED ICR HAZ WASTE REPORTABILITY

6/2012 - 2 Year review - (R.Maier) - Updated permit numbers
8/2013 - Removed DuPont and replaced with Axalta
7/2014 - Reviewed (M. Dwinnells)
9/2014 -out for review-

I. RESPONSIBILITY

It is the responsibility of all members of the Safety, Health and Environmental Group to comply with the activities, documented procedures and work instructions defined within the stated scope of the Axalta Coating Systems Plant in Mt. Clemens, Michigan. It is also the responsibility of the user to identify any part of the procedure that the user feels may be incorrect. Users are expected not to deviate from this procedure, (except in emergency situations), until the proposed change or changes has or have been documented, reviewed, approved and the users have been instructed in the change. No hand written changes to this procedure are permitted.

II. P.P.E. & ADDITIONAL EQUIPMENT REQUIRED

None

III. SAFETY PROCEDURES TO BE FOLLOWED PRIOR TO PERFORMING THIS OPERATION

1. Refer to AOP #SAF_A008; HAZARDOUS MATERIAL HANDLING AND PERSONAL PROTECTIVE EQUIPMENT, for more information. Operators should familiarize themselves with the hazards of the materials and the proper P.P.E. needed for each task. Properties and material hazards are listed in the Material Safety Data Sheets (MSDS) which are accessible from the computer located outside of the cafeteria. The proper P.P.E. requirements are illustrated on the S-Code posters throughout the area.

2. Precautions to be taken if exposure to chemicals should occur:

   A. Personnel exposed to chemicals should always use the safety showers if any hazardous material is spilled on the body.

   B. The eye wash station is used if the eyes are exposed to any material.

   C. Follow-up medical attention is required.

3. Control measures to be taken if loss of containment occurs (i.e. any chemical release, leak or spill): Refer to AOP #PLT_A003, SPILL CLEAN-UP, for more information.

4. Process Hazards Analysis confirms that proper grounding is the first line of defense against a mixer flash fire (see the Plant Grounding Standard (AOP # PLT_A009). Inerting is the second line of defense (see the Plant Inerting Standard (AOP # PLT_A025) for details).

IV. DEFINITIONS

1. A **"release"** is generally defined as spilling, leaking, pumping, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing.

2. A **"chemical"** or "hazardous substance" includes substances considered to be toxic or hazardous under specific regulations (includes oil).

3. A **"release to the environment"** essentially means that the material has left the original container and has gone to land, water and/or air. Some regulations allow exemptions for releases and therefore only the Facility Emergency Coordinator and/or their designate can determine whether a release to the environment has occurred.

4. **"As soon as practicable (or practical)"** generally means within 2 hours of determining that a reportable release has occurred. The NRC states that notification must be made within 15-minutes of the release.

5. A **"harmful quantity"** of oil under the Clean Water Act means A discharge must be reported to the EPA Regional Administrator (RA) when there is a discharge of:

   - More than 1,000 U.S. gallons of oil in a single discharge to navigable waters or adjoining shorelines
   - More than 42 U.S. gallons of oil in each of two discharges to navigable waters or adjoining shorelines occurring within any twelve-month period

   When determining the applicability of this SPCC reporting requirement, the gallon amount(s) specified (either 1,000 or 42) refers to the amount of oil that actually reaches navigable waters or adjoining shorelines, not the total amount of oil spilled. **"Harmful Quantity"** also means a hazardous substance listed under 40 CFR 302, Table 302.4 in a quantity equal to or greater than the reportable quantity.

6. **"Liquid industrial wastes"** are defined under Michigan Part 121 and include non-hazardous brine, by-product, industrial wastewater, leachate, off-spec commercial chemical product, sludge, sanitary or storm sewer clean-out residue, grease

trap clean-out residue, spill residue, used oil, or other liquid waste not regulated by other laws.

7. **"Polluting materials"** are defined under Michigan Part 5 regulation and include oil, salt, materials specified in Table 1 of the Rule and any component or product that contains > 1% by weight of any material(s) that is listed above.

8. The site **"Facility Emergency Coordinator"** is as defined in 40 CFR 265.55.

9. In order to determine if a material is an **"Oil"**, the material should be evaluated against the following five criteria set forth in an EPA/USCG memo.
   1) limited water solubility [43FR10477, 431FR0488], **and**
   2) a relative cohesive mass upon discharge [43FR10488], **and**
   3) the potential for leaving a residue and being detected in a water body [39FR30466, 43FR10488], **and**
   4) the ability to be removed from the navigable waters and adjoining shorelines using currently available technology and equipment* [43FR10488], **and**
   5) the potential to cause any of certain adverse environmental effects (noted below).

V. ENVIRONMENTAL INCIDENT - AGENCY NOTIFICATION SYSTEM

Notification of "releases to the environment" to appropriate environmental and/or governmental agencies is the responsibility of the Facility Emergency Coordinator or their designated alternate. The following is the decision process used to determine reportability of a release to the environment (non-fire event). General guidelines for this process were obtained from the Michigan Department of Environmental Quality "Release Notification Requirements in Michigan". Please note that this procedure does not include notification required under Act 207 of the Fire Prevention Code. The procedure to contact the Mt Clemens Fire Department is outlined in site procedure FIR_A003 and is not affected by the following process.

Chemical releases in Michigan are potentially reportable under one or more of twenty-seven different state and federal regulations. Once it has been determined that a "release to the environment" (as defined by the regulating community and as determined by the Facility Emergency Coordinator) has occurred, a determination must be made as to whether the release is "reportable" under a state, federal and/or local regulation. The first step in the process for determining reportability is to review the released product MSDS and/or formula information and to ascertain, to the extent feasible, the quantity that has been released to the environment. Two important tools for referencing reportable quantities are the "Title III List of Lists" and the Michigan Part 5 Table 1 list of "polluting materials". The quantity released and the breakdown of pure product or product

components is calculated and then compared to these lists in order to assess whether the release is reportable or not. The following is a list of relevant regulations and the reporting requirements stipulated by each regulation.

Note: Some releases may be reportable under more than one regulation and/or criteria. A list of relevant contacts and phone numbers is included in Section VI of this document.

1. A release that exceeds the reportable quantity (RQ) of a substance that is listed under SARA Title III, Section 304 must be reported immediately to the Local Emergency Planning Committee (LEPC) and the State Emergency Response Commission (SERC). In Michigan the MDNRE Pollution Emergency Alerting System (PEAS) Hotline accepts notification on behalf of the SERC. Written follow-up reports are required "as soon as practicable after the release" to the LEPC and SERC.

2. Releases to the environment that are equal to or that exceed quantities outlined in CERCLA 40 CFR 302, Table 302.4, must be reported immediately to the National Response Center (NRC). No written follow-up reporting is required to the NRC for releases that are reportable under CERCLA.

3. If the CERCLA release occurs during transportation it is also reportable "as soon as practical" to the US Department of Transportation (DOT). Releases of infectious substances (including medical waste) or marine pollutants during transportation are also reportable to the US DOT (40 CFR 171). Releases that are reportable to the US DOT require written follow-up reporting within 30 days of discovery.

4. Releases of "polluting materials" listed under Michigan Part 5 that exceed the threshold quantity must be reported via the PEAS Hotline "as soon as practicable" after detection. A written report is required to the chief of the MDNRE waste management division (WMD) within 10 days.

5. A release of oil in "harmful quantity" is reportable under the Clean Water Act (CWA) Section 311 to the NRC with no follow-up written report required.

6. Releases from underground storage tanks (UST) are reportable under Michigan Part 211 and Part 213. The Axalta Mt Clemens Plant currently has no USTs.

7. Under Michigan Hazardous Waste Regulation Part 111, a release to the environment of > 1 pound of hazardous waste from a tank or secondary containment is reportable to the PEAS Hotline and to the NRC (if it threatens human health or environment outside the facility). A written follow-up report is required to the MDNRE - WMD within 30 days in

this instance and 15 days if the contingency plan had to be implemented. Consideration must be given to reporting releases of materials exhibiting ignitable, corrosive, and/or reactive (ICR) characteristics (i.e. D001, D002, and D003) pursuant to RCRA.

8. A release of liquid industrial waste (LIW) that could threaten public health, safety, welfare, or the environment or that has reached surface or groundwater is reportable immediately to the PEAS Hotline and a written report prepared within 30 days to be available upon request by the MDNRE – WMD district supervisor.

9. Non-permitted discharges to the site sanitary sewer system are reportable immediately to the City of Mt Clemens Wastewater Treatment Plant (WWTP) under site permit IP-001.

10. A release of IP-001 discharge (i.e. sanitary waste) to land or waters of the US requires immediate reporting to the MDEQ surface water quality division (SWQD) (PEAS after hours), the local health department and the local drain commission. At the end of the discharge form EQP 5857 must be filled out and sent to all parties that were originally notified. Additional reporting and public notifications (notice in newspaper) may be required.

11. A release of PCB at concentrations of > 50 ppm at quantities > one pound is reportable under CERCLA, CWA, and TSCA to the NRC and to the USEPA Region V Toxic Program Section.

12. Site General Stormwater permit MIS110000 (COC # MIS111703) require that:

    Storm water shall be defined to include all of the following non-storm water discharges provided pollution prevention controls for the non-storm water component are identified in the SWPPP:

    a. discharges from fire hydrant flushing;
    b. potable water sources including water line flushing;
    c. water from fire system testing and fire fighting training without burned materials or chemical fire suppressants;
    d. irrigation drainage;
    e. lawn watering;
    f. routine building wash down which does not use detergents or other compounds;
    g. pavement wash waters where contamination by toxic or hazardous materials have not occurred (unless all contamination by toxic or hazardous materials have been removed) and where detergents are not used;
    h. air conditioning condensate;
    i. springs;

DIAGRAM 1 – NOTIFICATION PROCESS
PAGE 1 OF 3

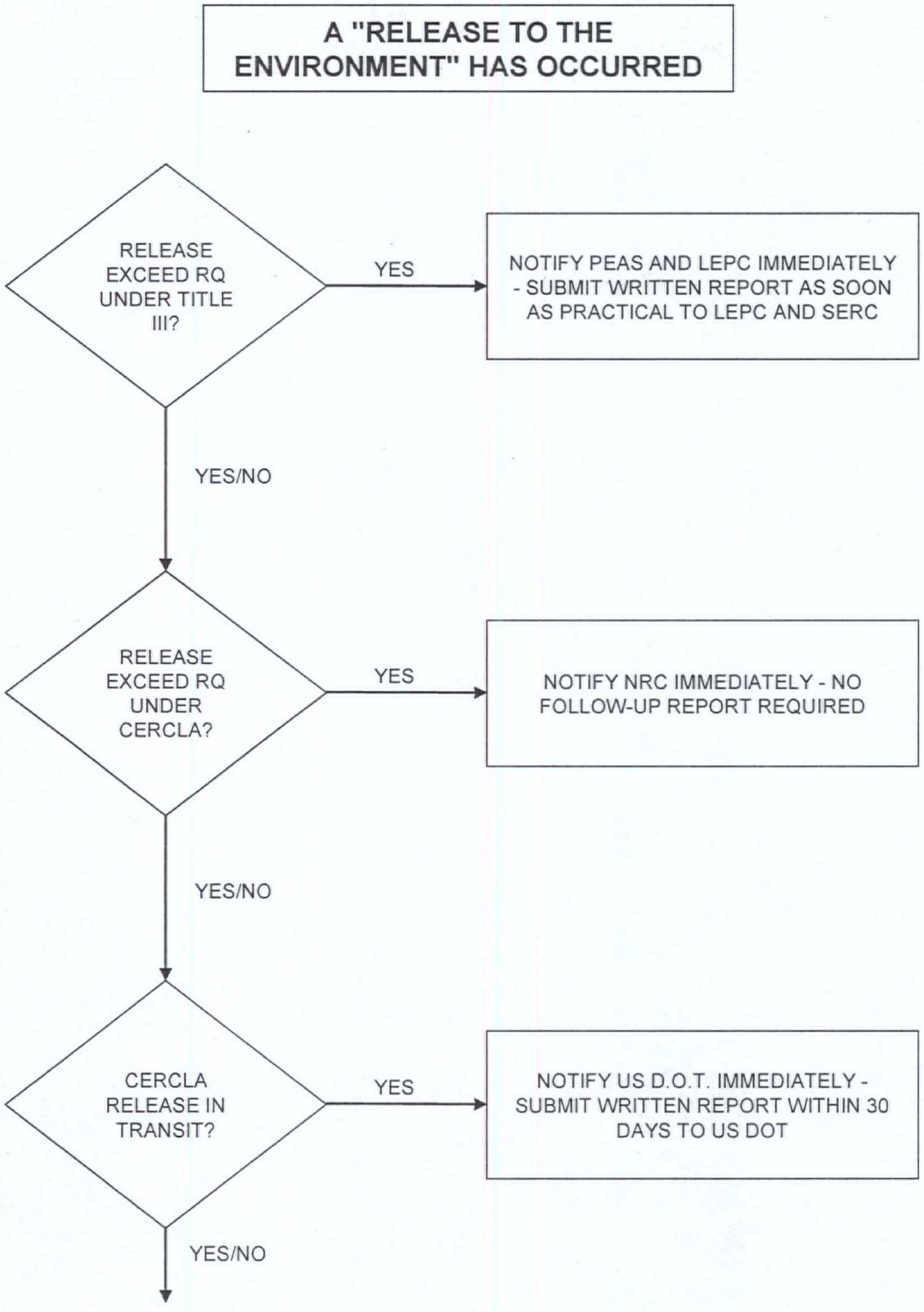


DIAGRAM 1 – NOTIFICATION PROCESS
PAGE 2 OF 3

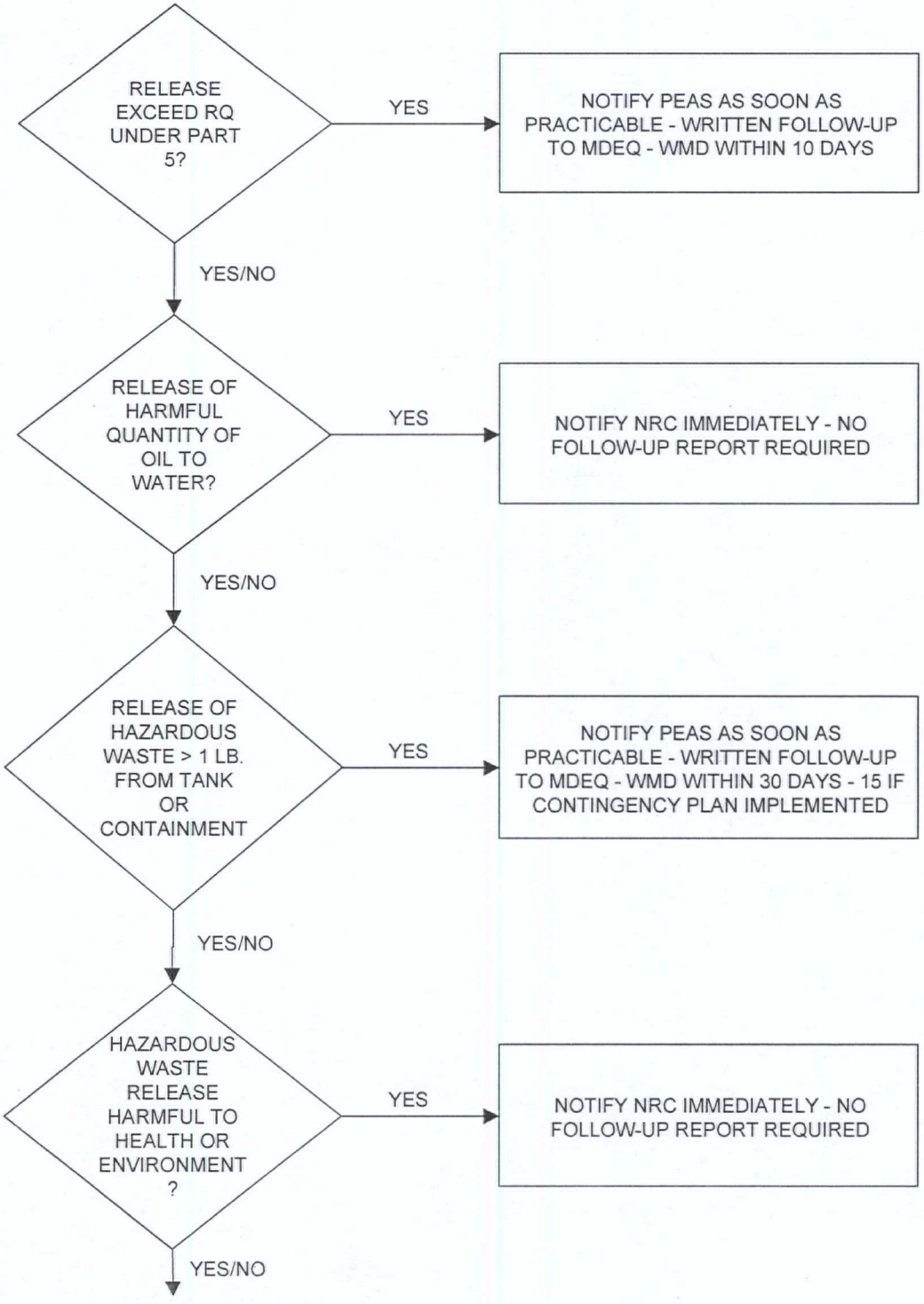
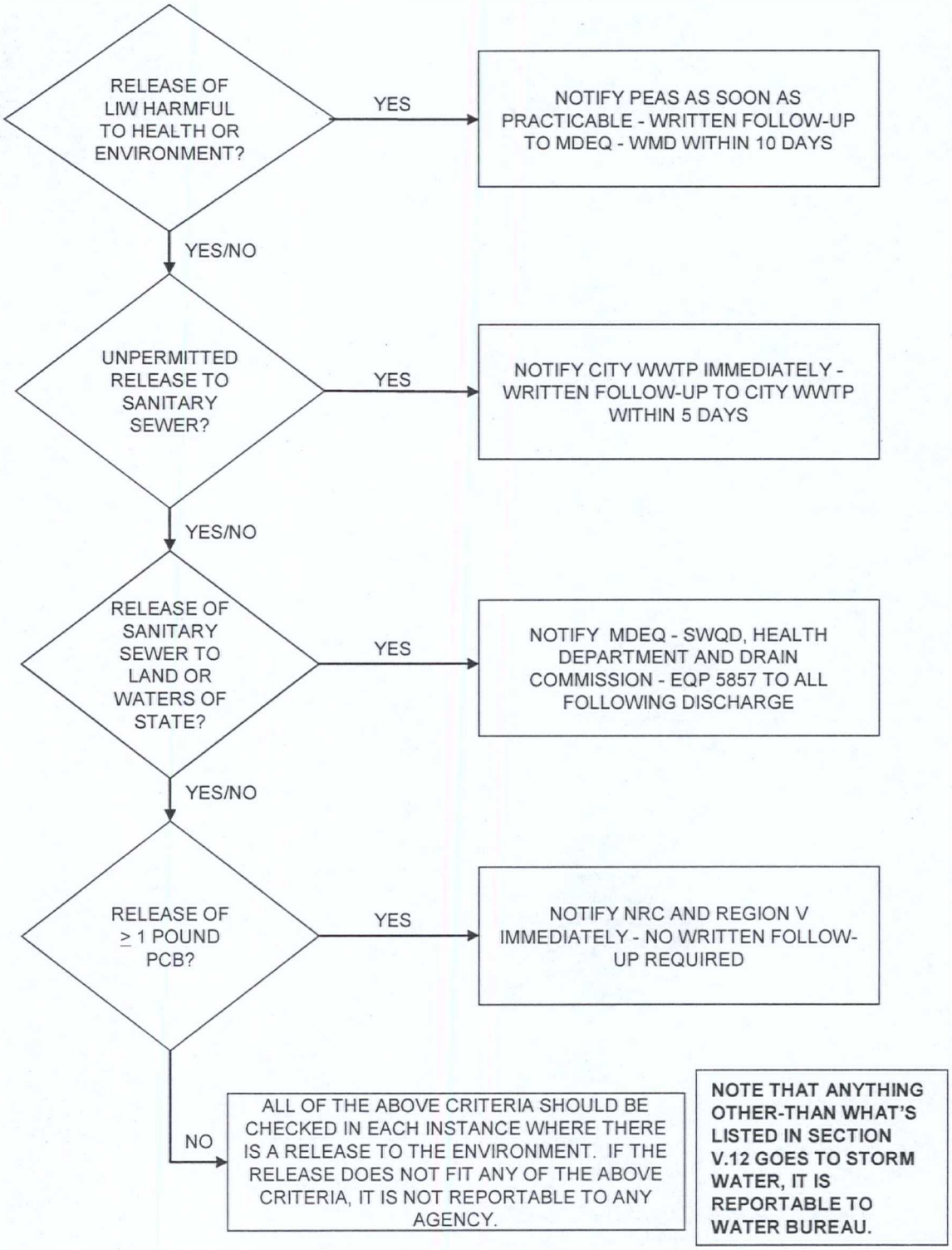


DIAGRAM 1 – NOTIFICATION PROCESS
PAGE 3 OF 3



VI. IMPORTANT CONTACTS AND PHONE NUMBERS

The following are primarily for reporting of releases as required by the regulations outlined in this procedure. See Procedure TOL_A017 for emergency call information for the Toledo Plant.

Note: This list does not include those contacts requiring notification under other emergency situations such as fire or medical emergencies. See the Macomb County LEPC Emergency Response Plan for the Axalta Mt Clemens Plant for other emergency notification information.

COUNTY EMERGENCY MANAGEMENT COORDINATOR AND LEPC: 586-469-5270

24-HOUR DISPATCH: 586-469-5502

PEAS HOTLINE AND SERC: 800-292-4706

EPA NATIONAL RESPONSE CENTER AND US DOT: 800-424-8802

LOCAL OFFICE: 734-692-7660

US PUBLIC HEALTH SERVICE: 800-232-0124 (INFECTIOUS SUBSTANCES)

MT CLEMENS WASTEWATER TREATMENT PLANT: 586-469-6889

MICHIGAN DEPARTMENT OF ENVIRONMENT QUALITY (MDEQ):

MAIN DISTRICT OFFICE: 586-753-3700

WATER BUREAU: 586-753-3788

AIR QUALITY: 586-753-3748

WASTE DIVISION: 586-753-3846

OTHER AGENCIES THAT MAY BE CALLED FOR ASSISTANCE

COMMUNITY EMERGENCY MANAGER: 586-469-6840

MACOMB COUNTY SHERIFF: 586-469-5502

MACOMB COUNTY PUBLIC WORKS: 586-469-5325

MACOMB COUNTY ROAD COMMISSION: 586-463-8671

MACOMB COUNTY DRAIN COMMISSION: 586-469-5325

MACOMB COUNTY HEALTH DEPARTMENT: 586-296-4499

AXALTA COATING SYSTEMS
OPERATING PROCEDURE

MSDS for any hazardous material(s) used in this procedure are available via computer.

SOC & Design Basis Database
Safety and Environmental Controls

TITLE: HAZARDOUS MATERIALS HANDLING & PERSONAL PROTECTIVE EQUIPMENT

			AUTHORIZATION SIGNATURE & DATE
ORIGINALLY DATE OF ISSUE:	12/18/96	PREPARED BY:	D. TRABBIC-POINTER
DATE OF LATEST REVIEW/REVISION:	07/2013	BY:	R. SCHMITZ
		OCCUPATIONAL HEALTH RESOURCE:	R. SCHMITZ
		AREA MANAGER:	D. BERGEON
		PSM RESOURCE:	N/A
		SHE RESOURCE:	R. SCHMITZ
DATE TO BE REVIEWED:	5/2015		

REVIEW INTERVAL: 1 YR. X - 2 YRS. 3 YRS.

ATTACHMENTS INCLUDED:
MT. CLEMENS APPROVED P.P.E.-CHART 1,
MT. CLEMENS APPROVED P.P.E., NON-CRIB ITEMS - CHART 1
P.P.E. GENERAL PLANT GUIDELINES-CHART 2,
P.P.E. EQUIPMENT INFORMATION-CHART 3,
CARE & MAINTENANCE OF P.P.E.-CHART 4,
SPLASH GOGGLES VS. FACE SHIELD SELECTION-CHART 5.
WHERE DO WE NEED RESPIRATORS - Chart #6
Lab S-code Chart #7
LAB PPE CHART #8
LAB GLOVE MATRIX - CHART 9
Coveralls Chart 10

PURPOSE: DEFINE PROCEDURES GOVERNING THE HANDLING OF HAZARDOUS MATERIALS AND THE PROPER PERSONAL PROTECTIVE EQUIPMENT APPROVED AND REQUIRED FOR USE BY THE S-CODE SYSTEM, AND PLANT PRACTICES.

SPECIAL P.P.E. / TOOLS REQUIRED: ALL APPROVED AND SITE-AVAILABLE P.P.E. AS APPROPRIATE AND DESIGNATED IN THIS PROCEDURE.

REASON FOR REVISION: UPDATED PAGES 8 & 9-APPROVED P.P.E., WITH UPDATED INFO.

7/18/00 (D. TRABBIC-POINTER) - ANNUAL REVIEW - ENTIRE PROCEDURE HAS BEEN REWRITTEN

8/22/01 (D. TRABBIC-POINTER) - ANNUAL REVIEW - CHANGES TO SECTION VIII TO ADD LAB SPECIFIC PPE INFORMATION, ADD CHARTS 5 AND 7

11/22/03 (D. TRABBIC-POINTER) - MOVED AND UPDATED LAB PPE, CHANGE FROM 1 TO 2 YEAR REVIEW INTERVAL.

3/11/04 (D. TRABBIC-POINTER) - UPDATE LAB GLOVE

8/6/04 (D. TRABBIC-POINTER) - ADDED INFORMATION ON NEW LEATHER GLOVE RECYCLE PROGRAM TO SECTIONS X AND IX AND NEW SECTION XII. ADD GLOVE TO LAB PPE, CHART 7. UPDATED CRIB STOCKED ITEMS, CHART 1.

11/18/05 (A. DECKER) - ADDED LABORATORY VERSUS NON-LABORATORY SOLVENT BATH EYE/FACE PROTECTION REQUIREMENTS, REPLACED ORANGE RUBBER GLOVES WITH NITRILE NON-DISPOSABLE GLOVES

10/10/06 (R.SCHMITZ) - UPDATED MT. CLEMENS APPROVED PPE LIST, (CHART 1 CRIB ITEMS), DELETED ORANGE RUBBER GLOVES FROM LISTS (CHARTS 1 & 4) (REPLACED IN 2005, SEE ABOVE REVISION), SECTION VIII. 3. REQUIREMENT FOR COMMUNAL USE OF GLOVES CHANGED TO "IS AN OPTION", SECTION XII.2 NON-STORED PPE LIST KEPT IN OH FILES ADDED.

5/1/07 (R. SCHMITZ) - ADDITION: REFERENCE FOR PPE WITH ELECTRICAL HAZARDS TO SECTION VII, LABCOAT NOTE TO SECTION VIII

4/7/2009 (R. SCHMITZ) - ADDITION OF EAR PUSH_IN POD PLUGS AND EXPRESS POD PLUGS DELETED IN CHART 1 CRIB ITEMS

4/22/2009 (R.SCHMITZ) - ADDITION TO SECTION VIII C. STATEMENT INSERTED REGARDING LATEX GLOVES (GLOVES WERE REMOVED FROM SITE APPROX EIGHT YEARS AGO) DELETION OF GLOVE VENDING MACHINE FROM SECTION XII.

5/2009 (L. PLATT) - 2 YEAR REVIEW - NO CHANGES

9/2009 (R.SCHMITZ) - ADDITION CHART # 6 "WHERE DO WE NEED RESPIRATORS
12/2009 (R. SCHMITZ) APPROVED PPE CHART UPDATED, ADDITION OF PPE APPROVAL PROCESS, CHART 10 TO DOCUMENT. DOCUMENT SEPARATED IN DOM DOC.
3/20/2009 (R.SCHMITZ) ADDITION OF CHART 11
5/2011 (L. PLATT) BI ABBUAL REVIEW ADDED SITE SAFETY & ENVIRONMENTAL & MSDS
12/16/2011 CLARIFICATIONS TO HAND PROTECTION - SECTION VIII
7/2012 - UPDATED SEC V. 6 (ADDED "REMOVE AFFECTED CLOTHING WHILE SHOWERING")
3/2013- OUT FOR REVIEW-UPDATED BY RITA SCHMITZ

5/6/2013 (C. MEAKEM) - 2 YEAR REVIEW; MINOR FORMATTING CHANGES

Table of Contents

III. INTRODUCTION

1. The purpose of this procedure is to deal with the potential for employee exposure to chemical hazards in the workplace and to create an understanding of administrative control measures that can be taken to protect against accidental exposure. Specifically, this procedure addresses the fundamental rules for handling hazardous materials and the personal protective equipment that must be worn when the potential for exposure exists.

IV. IMPORTANT DEFINITIONS

Breakthrough: The movement of a chemical through a protective barrier to the other side.

Breakthrough Time: The elapsed time from the start of the test until the first moment that breakthrough is detected.

Chemical Resistance: The ability of a material to withstand chemical and physical change.

Cleanability: The ability to effectively decontaminate protective materials or a relative measure of the ability of a material to release the contact substance.

CPC: Chemical protective clothing. Typically this clothing is manufactured synthetic material such as neoprene, nitrile and polyvinyl chloride (PVC).

Decontamination: The safe neutralization or removal of a contaminant.

Degradation: A deleterious change in one or more physical property of protective clothing or equipment due to contact with a chemical.

Durability: The ability to withstand wear and resist punctures, abrasion, and tears, i.e. inherent strength.

Flexibility: The ability to bend or flex; pliability.

Penetration: The transport of chemicals through openings in a garment on a nonmolecular level.

Permeation: The process by which a chemical moves through chemical protective clothing on a molecular or non-visible level.

Permeability: The ability to pass through a substance or material.

PPE: Personal protective equipment.

Adequate Ventilation: Adequate ventilation means that the ventilation located at the task should be such that the permissible exposure limit (PEL), ACGIH or Axalta Coating Systems AEL of the material in question is not exceeded. Where such limits are not established, the ventilation should be that dictated by the best information available (e.g. Axalta Coating Systems Engineering or the ACGIH publication, "Industrial Ventilation".)

M-Coded or Restricted Materials: The letter "M" preceding the S-code (e.g. MS-1) indicates a chronic health hazard. Refer to the "S" code value for personal protective equipment in handling these materials. Some of these materials may require either special protective equipment not adequately described by the S-code system, or they may require special receiving, storage, handling or disposal procedures.

AOP #OCH_A005 further explains the hazard implications of M-coded materials. Area procedures (AOP) may also describe special handling of these materials.

V. GENERAL HYGIENE AND FUNDAMENTAL RULES FOR HANDLING HAZARDOUS MATERIALS

There are fundamental rules to be observed in materials handling, regardless of whether or not they are hazardous. They are as follows:

1. No material is to be taken internally.

2. Hands must be washed before eating or smoking.

3. No food or beverage may be stored or eaten in the operating areas of the plant, storage areas, Maintenance, and/or the R&D and Q.C. Laboratories. The basic concept is that packages containing food or gum should not be opened in the operating or chemical storage areas of the plant.

4. Containers with materials must be left closed when not in use. Spilled materials must be cleaned up immediately using safe methods.

5. Avoid all unnecessary skin contact, breathing or other exposure to chemicals. In case of accidental skin contact, wash the affected area with plenty of soap and water and notify your supervisor, and report to medical to determine whether further first aid, etc. is needed. Avoid using products such as Cupran on sensitive areas such as the face as it may irritate the skin.

6. If an employee's clothing is inadvertently contaminated with hazardous material, Remove affected clothing and footwear while showering and cover employee with Safety Blanket (*Such clothing and footwear must be disposed or decontaminated on site before laundered and reused*).

VI. PERSONAL PROTECTIVE EQUIPMENT - RESPONSIBILITY

In all cases where employees handle hazardous materials, the first line of defense is engineering controls, such as closed systems or local exhaust ventilation where the possibility for contact remains a potential, personal protective equipment (PPE) is required.

1. **OSHA 1910.132 is the governmental Standard which outlines requirements regarding Personal Protective Equipment (P.P.E.)** in the workplace. Requirements include that employees know:

   A. What PPE is necessary?
   B. When PPE is necessary
   C. How to properly put on/take off, adjust and wear PPE
   D. The care, maintenance, useful life and disposal of PPE,
   E. The limitations of P.P.E.

2. In order to comply with the requirements of OSHA 1910.132, the Axalta Coating Systems Mt Clemens Plant employs the following management system and outlined responsibilities.

   A. Employees

   - Where PPE is designated in this and in other area operating procedures, employees are required to wear the designated equipment.

B. Occupational Health Resource

- It is the Occupational Health Resource's responsibility to properly assess the hazards of all workplace tasks and to designate the protective equipment for the particular task. Corporate-based systems such as the S-code system are used as a fundamental guide to PPE selection along with vendor guidance and other professional resources.

C. Line Management

- It is the responsibility of management to provide the appropriate protective equipment to the employees. Line Management is also responsible for enforcement of the mandatory use of PPE in the workplace.

VII. PERSONAL PROTECTIVE EQUIPMENT - GUIDELINES

Every task that is performed in the workplace must be assessed for the hazards that it may present. OSHA breaks the potential hazards into the following classifications:

- Impact from flying fragments or objects
- Penetration of nails, screws, sheet metal
- Compression or "roll-over" by heavy objects
- Chemical splashes, irritating mists, direct contact with chemicals
- Harmful dusts such as sand, nuisance dust, pigments
- Light (optical) radiation such as intense radiation, glare or lasers
- Electrical hazards including working with hot wires/ conductors

Once the hazard has been identified, the appropriate PPE must be selected that will best protect against the specific hazard. It is important to note that there is frequently more than one risk factor involved in a task and that numerous elements must be taken into consideration when choosing the appropriate PPE for the task. This is especially true for chemical protection because each chemical that is encountered exhibits properties that are different and that might cause the chemical to affect the PPE materials of construction in varying ways. Permeation, breakthrough time, durability and penetration (see definition section) are just a few of the mechanisms whereby chemicals can go through PPE materials to the worker's body. Careful selection using the best available information is extremely important to worker protection. Handling mixtures of chemicals further increases the difficulty in finding the best PPE for the particular application.

Chart 2 of this procedure lists site PPE, some of the hazards it protects against and when it should be worn. *Chart 3* describes the limitations of P.P.E. or what each piece of equipment will not protect against.

- **REFERENCE PROCEDURE MAIP489 FOR LISTING OF APPROVED PPE AND ITS USE AGAINST ELECTRICAL ARC FLASH AND SHOCK HAZARD POTENTIALS.**

VIII. TYPES OF PPE

The following describes some of the basic types of protective clothing used at the Mt Clemens Plant.

1. Safety Glasses with Side Shields

   - Protects against impact to eyes from flying objects in the workplace. Safety glasses with side shields are required in all areas of the plant outside of offices and office buildings. In all cases where safety glasses are required, side shields must also be worn.

2. Flash Fire Protection

   A. Nomex Clothing

   - Nomex® Clothing is required in all hazardous rated areas of the plant. Nomex® is primarily for protection against flash fires and is required in accordance with Mixer Loading Safety Guidelines. Details on the required use of Nomex® clothing is further defined in site procedure SAF_A005.

   B. Nitrometer-style Face Shield.

   - These are face shields that include the upper and lower "clam shell" coverage for improved face protection. This is the only type of face shield that is provided for use at the Mt Clemens facility.

   Nitrometer-style face shields are required as outlined below:

   - Loading high risk flammables in other than closed systems (greater than 55 gallons)
   - As designated by S-code
   - *Chart 5* of this procedure outlines plant-wide guidelines for the proper use of face shields and goggles.

     In all cases, a face shield must be worn over primary eye protection (i.e. safety glasses or goggles). A general rule-of-thumb is that face shields protect against flash fires and goggles protect against splashes to the eyes.

   C. Hand Protection (Reference Chart 9)

Approved gloves shall be worn to protect the hands from burns. Gloves approved for flash fire protection include leather and polymer coated cotton.

3. Gloves for cut/abrasion resistance

- Leather gloves afford limited protection against cuts, metal slivers and other abrasions.
- Kevlar gloves coated with rubber or nitrile are provided for use with tools or knives and while handling drums. These gloves do not provide chemical protection.

3. Chemical Protective Clothing (CPC)

The S-code system is the Performance Coatings designation system for outlining chemical protective clothing specific to each material being handled. Toxicology and industrial hygiene experts assign the S-code in recognition of the hazards presented by the particular material. Specifically, the PPE selected for each S-code level is designated to protect the route of exposure that is most at risk (e.g. skin, eyes, and respiratory system). The S-code does not measure toxicity or how hazardous the material might be but only indicates the protective equipment and conditions required to prevent harmful exposure to materials. The S-code label or marking is used on raw material, intermediate and finished products to alert the worker to the recommended personal protective equipment.

The following gives basic information about the some of the types of chemical protective clothing provided at the Mt Clemens Plant.

A. Synthetic Gloves

- In the "S" code system, "Synthetic Gloves" means skin protection for the hand and arm as required. Synthetic means rubber, polyethylene, or other impervious materials such as "Neoprene" or "Polyvinyl Alcohol (PVA)". All synthetic gloves should be considered as personal protection but if communal use of gloves is desired the use of cotton liner-gloves is an option.

Latex gloves are not allowed on site. Latex contains proteins that can cause allergic reactions. In addition, the chance of a person becoming sensitized and developing an allergy to latex increases as his or her exposure increases.

B. Synthetic Apron and Raincoat

- Materials specified for gloves also apply to aprons and raincoats. Aprons are specified where torso and leg upper leg protection is required. Raincoats, in conjunction with synthetic gloves, meet the requirement for materials designated "S5" and "S6" and where arm and body protection is required.

C. Splash Goggles

- Chemical splash goggles are required while handling materials whose S-code designates their use. In addition to the S-code designation, *Chart 5* of this procedure outlines additional tasks where they are required, either by themselves or in conjunction with a face shield.

Note: Goggles do not replace face shields and face shields do not replace goggles in regard to chemical protection.

D. Respiratory Protective Devices

- See AOP #SAF_A027 for information on respiratory protection.
- Reference Chart #6 for "where do we need respirators"

Powered air purifying respirators (PAPR) meet the requirements of a face shield (nitrometer mask), respirator, and goggles. Reference AOP SAF A006 and PLT A034 for information on PAPR.

E. Coveralls

- White Tyvek and the blue Tempro coveralls are not designated by the S-code system. Protective coveralls protect against particulate materials and therefore are acceptable for use when handling most pigments and powders. Coveralls are required when handling "S4" materials. Tyvek coveralls may be worn instead of a synthetic apron for **"S4" materials only.**

The white Tyvek and blue Tempro coveralls have been assessed as being acceptable protection for handling "S4" materials under normal handling conditions.

Since the white Axalta Coating Systems Tyvek will not allow microscopic particles to pass through Nomex and leave residue, *they will be recommended for loading boxes/bags of dry materials capable of leaving any*

residue on Nomex. Dust collection systems have been improved but these white Tyvek coveralls without hoods will continue to be ***required in the WB Intermediates area when loading S4 materials to the portable tanks on the platforms.***

Evaluating the hazards, there is the potential for flash fire in the production area but it is a rare potential with all safeguards (i.e. grounding etc.) in place. Knowing there is exposure if there is dry mica on Nomex with the potential to becoming an inhalation hazard an alternative to the blue Tempro is Axalta Coating Systems white Tyvek coveralls **without a hood.** A Nomex hood is available in the crib if head protection is desired.

Because white Axalta Coating Systems Tyvek coveralls do not have the flame retardant that the blue Tempro coveralls have, ***they should never be in direct contact with the skin.*** These white Tyvek coveralls should only be worn over Nomex clothing because of the potential for burns that could be caused by direct skin contact with burning Tyvek in the event of a flash fire. This means that only the ***white Tyvek coveralls that do not have hoods will be allowed*** in the paint production area. PAPRs are used with S4 loading but if additional head covering is preferred, Nomex hoods are available in the crib. These hoods would then be discarded with the coveralls when loading and clean up are completed.

Reminders:

****White Tyvek and blue Tempro Coveralls must always be worn over Nomex in areas where Nomex is required.**

****Do not don/doff coveralls near tanks since here is always a possibility of static discharge.**

****Refer to Chart 10**

4. Minimum Required Laboratory PPE

All laboratory work where the potential exists for flying particles or debris to enter the eyes and/or where hazardous chemicals are handled requires safety glasses with side shields at a minimum. ESD Safety shoes are required for employees in laboratories that are handling **quantities of materials and containers greater than a quart and/or packages of paint panels (refer to PLT_P046 - Safety Shoe Requirements).**

Laboratory tasks typically involve the handling of smaller quantities of hazardous materials and in a more controlled environment. The S-code system was developed for large quantity handling and therefore allowances can be made for the difference in risk when handling these smaller lab quantities. *For purposes of hazard assessment, "small quantities" have been defined as 2 liters or less of an S-2 or S-3 material, 10 pounds or less of an S-1 or S-4, and one quart or less of an S-5 or S-6.* A modified S-code system has been derived for use in laboratories that reduces PPE requirements but that still affords adequate protection to lab employees. Chart 6 of this procedure gives a pictorial view of the laboratory S-code system.

The S-code system is as follows. Reference definitions above for the meanings of "adequate ventilation" and "synthetic".

S-Code	Protective Equipment
S-0	None normally needed, however, refer to the fundamental general hygiene rules
S-1	Leather gloves + air purifying respirator + adequate ventilation
S-2	Synthetic gloves + adequate ventilation
S-3	Synthetic gloves + synthetic apron + splash goggles + adequate ventilation
S-4	Synthetic gloves + Synthetic apron + splash goggles + respirator + adequate ventilation
S-5	Air line mask or adequate ventilation with face shield/respirator + synthetic gauntlet + Synthetic apron
S-6	Air line mask or adequate ventilation with face shield/respirator + goggles + synthetic gauntlets + synthetic apron + synthetic boots
S-7	Synthetic gloves + adequate ventilation + Full body cover with supplied air + Synthetic boots

Laboratory S-Code System

S-0	Reference "Minimum Required Laboratory PPE"
S-1	Leather or cotton gloves (see glove matrix Chart 7) + air purifying respirator + adequate ventilation
S-2	Synthetic gloves + adequate ventilation
S-3	Synthetic gloves + chemical goggles + lab coat + adequate ventilation
S-4	Synthetic gloves + chemical goggles + lab coat + air purifying respirator + adequate ventilation
S-5	Synthetic gloves + lab coat + fume hood
S-6	Synthetic gloves + lab coat + chemical goggles + fume hood

****Lab Coats are a recommended practice but they are not chemical protective clothing.**

IX. P.P.E. APPROVAL SYSTEM

1. The following describes the approval system used to assure that no inappropriate or unapproved purchases are made for protective equipment.

   A. *Chart 1* of this procedure lists all approved equipment for purchase and use at the Mt Clemens site and the associated SAP number where applicable.

   B. The Plant Storeroom stocks only those PPE items listed and approved by the Safety, Health, and Environmental (SHE) Office.

   C. The Facility Purchasing Group is directed not to purchase non-stores or non-listed PPE without prior approval of the SHE Office.

   D. The purchasing group also reviews procurement card purchases on a regular basis to assure no unauthorized purchases of PPE are made.

X. CLEANING, CARE AND MAINTENANCE OF PPE

It is important to properly care for protective equipment and to understand when it is necessary to discard it after its useful life. In some cases, such as limited use respirators and surgical-type nitrile gloves, the useful life of the PPE is either defined by hours of use or by one-time use. For other types of PPE it is not as well defined. The wearer must be cognizant of what to look for in determining if specific PPE has passed its useful life. Indications may include visible cracks or holes in the material or it could be that breakthrough has occurred and the inside of the glove or PPE feels damp. In these instances the PPE should be disposed of with Paint Contaminated Solid Waste. Leather gloves that have been soaked with solvents, even if they have since dried, should be discarded as they may still cause occupational dermatitis with skin contact. **Soiled leather gloves should be discarded in the appropriate waste drum designated in each area specifically labeled for leather gloves.** Synthetic aprons and raincoats that have been contaminated on the inside or that have been contaminated with higher S-code materials such as isocyantes, monomers or amines, should also be discarded.

PPE that is not normally a one-use item or that is not grossly contaminated can and must be properly cleaned, maintained and stored in provided PPE lockers or storage racks designated in each area for this purpose. *Chart 4* of this procedure lists some of the ways that the specific PPE may be cleaned. The chart also gives general guidance on how best to put on and take off PPE so as not to come into contact with potential contaminants that may be on outside surfaces.

XI PPE STORAGE

All employees required to wear PPE must be provided with storage that keeps potentially contaminated personal protective clothing away from personal items and street clothing. At a minimum, an employee should be provided with a space that allows for the storage of a personal face shield, 3M air-purifying respirator and container, and splash goggles. For areas where PAPR's are required and/or used, storage capable of containing the PAPR system must be provided. Where additional PPE clothing, such as aprons, raincoats and/or boots are required, larger storage should be provided. Locks are acceptable for use on PPE storage lockers. However, locks should be supplied by the employer and there must be a master key available to allow for periodic inspection of PPE lockers during any shift.

XII. ACQUISITION OF PPE

1. When a new pair of leather gloves is necessary, employees are required to discard the old pair of leather gloves in a recycle drum and receive a new pair at the Crib Store.

2. As outlined in Section IX of this procedure, the site S.H.E. Office must approve store and non-store item PPE. If non-stock PPE is requested or becomes necessary, the Occupational Health Resource must be contacted and written authorization must be forwarded to the person requesting the PPE and to the Purchasing Group. Authorization may be in the form of an email or hard copy mailing. The list of non-store PPE for specific employees or areas is kept in the Occupational Health files.

MT. CLEMENS APPROVED P.P.E. (CRIB ITEMS) - CHART 1	
EQUIPMENT DESCRIPTION	**SAP#**
Hat Bump w/liner Fibr-Met - E-2RW	103475
Cap Scull Bull - Bd 3358-M	99159
American Allsafe Drybrow (Band Sweat Allsafe AA100)	100903
GLOVES	
Neoprene Best Glove (Black) 6780R Long	100064 100063
Touch N Tuff Disposable Nitrile Gloves 92-500 (68-305-95204)	103468 (L)
Ansell Solvex II (green), flock lined	1239355 - 7 1239354 - 8 1239353 - 9 1239352 - 10 1239351 - 11
Mapa Professional Stantoil Supported Neoprene Gloves NL52 (blue/black)	99168 (XL) 100920 (L) 100919 (M) 100918 (S)
Hyflex CR	1112206 - 7 1112207 - 8 1113000 - 9 1112208 - 10 1112210 - 11
Industrial Work Gloves - Leather Wells lamont	1376397 - XL 1376398 - L 1376399 - M 1376400 - S
W.H. Salisbury & Co. Lineman's Rubber Gloves (5-11)	108102
Lab Oven Gloves - Reversed Kevlar Terrybest Not a free issue crib item - For ordering needs, contact Dave Wilson (OEM MT Coordinator). *If additional gloves are ordered, manufacturer can not stamp size on label so use permanent marker and label size on inside glove tag.	G44RTRF14 (Reg) G43RTRF14 (Large)
Glove liners	103370
HEARING PROTECTION	
Aearo E.A.R. Taper Fit 2 (312-1224)	99190
Aero E.A.R. PUSH-IN pod plugs (311-1115)	1123362
Moldex "Softies" Earplugs w/Cord	218158
Ear muffs, Bilson Viking V3	99163
EYE PROTECTION	

MT. CLEMENS APPROVED P.P.E. (CRIB ITEMS) - CHART 1	
EQUIPMENT DESCRIPTION	**SAP#**
UVEX Bandit Wrap-Around Frame Safety Glasses (SX half frame) 3M-12141-00000 SX 2000 antifog	1080315
MAXIM-13250- black adjustable temples, universal fit nosepiece cushioned brow	SAP 1080314
3M-12100-10000-20 QX black adjustable antifog	1080313
3M Virtua - 11326-00000 (at Security)and crib	1083112 108312
3M-12159-00000 (fits over most frames at Security and crib)	1080311
3M Refine 201- Teal frame clear anti-fog lens 11735-00000 (Fits smaller face frame)	
3M Centurion Protective Goggles Impact and Chemical Splash 40304-00000 454AF Clean/Anti-Fog Lens	1428773
3M safety antifog splash goggles 16644-00000	
MSA Face Shield (propionate visor) Chem Guard Head Gear Visor	72746 196952 10087022
Sellstron (acetate) face shield 38520	113517
RESPIRATORS and PARTS, Storage	
3M 5000 Series Easi-Care Dual Cartridge Respirator Organic Vapor 5101 Small	107489
3M 5201 Medium Organic Vapor Assembly Dual Cartridge Respirator	107490
3M 5301 Large Organic Vapor Assembly Dual Cartridge Respirator	107491
3M 501 Filter Retainer NJN 4240-01-302-5290	107492
Rubbermaid Container Dur-X 6304 4Qt	108543
3M 5101 Small Easicare Dual Cartridge Respirator Organic Vapor	107489
3M 5201 Medium Dual Cartridge Respirator Organic Vapor Assembly	108926
3M 5301 Large Dual Cartridge Respirator Organic Vapor Assembly	107491
North Safety Products N7500-27 Fit Check/Filter Cover	80406
North 3000 Series 3001 - Organic Vapors	182906 (S) 182905 (M) 182907 (L)
North Filter 7506N95	182903

MT. CLEMENS APPROVED P.P.E. (CRIB ITEMS) - CHART 1	
EQUIPMENT DESCRIPTION	**SAP#**
PAPR L-series	
3M PAPR Knob/Pivot Kit L-141	234380
3M PAPR Breathing Tube L-122	224910
3M PAPR Sweat Bands L-115-10	234409
3M PAPR Softguard Face Seal L-120-5	234406
3M PAPR Head Gear Cove L-183 (has flame retardant)	234378
3M PAPR Wide View Lense Assembly L-130	234381
3M wide view face shield extender - L-137	1118664
3M PAPR Wide View Replacement Lense L-115-10	234409
3M PAPR Lense Covers L-133-100	234383
3M PAPR Head Suspension L-113-2	234379
3M Adapter flowmeter L-181 (not stored comes with PAPR if need replacement see PSM group)	
PAPR Helmet/face shield assembly transitioning to M-100 series)	
Respirator face shield with premium visor and flame resistant face seal, bumpcap unit	1439065
Bump cap inserts (M-170)	1439063
Face seal - flame resistant (M937)	1439066
Breathing tube (BT-30)	1439072
Visor replacement - premium (M927)	1439074
Peel off visor covers - premium (M-928)	1439061
Air deflector (M-116)	1439062
Suspension replacement for M-100 series (M-150)	1439070
Forehead comfort/sweat band M-957 /L-115	1439064
3M GVP-441 Organic Vapor/HEPA cartridge 70-0-1569-0	
Air valve regulator	
Battery GVP-111	214493
Battery charger GVP-112	383266
Comfort belt PAPR GVP - CB	1430146
Air valve regulator V-300	1439255
PROTECTIVE COVERING	

MT. CLEMENS APPROVED P.P.E. (CRIB ITEMS) - CHART 1	
EQUIPMENT DESCRIPTION	**SAP#**
Nomex hoods	284626
Nomex Protexal Jacket 51024	112245
Tyvek (Axalta Coating Systems) white long sleeve lab coats	1166603 XL 1166604 2X 1166605 LG 1166606 MD
Tempro blue coveralls	313245 3X 313246 2X 313247 XL 313248 LG 313249 MD 313250 SM 313251 4X
Tyvek (Axalta Coating Systems) white coveralls	1166607 2X 1166608 XL 1166609 LG 1166610 M
Tyvek (Axalta Coating Systems) hooded white coveralls	L XL 2X 3X 4X
Tyvek Shoe/Boot Cover Style 901	221456 - boot 188484 - shoe
Sythetic aprons (yellow) style - 1016172	
LaCrosse CK-3 synthetic chemical raincoat 2100-4400	2(Med) 2(L) 2(XL) 2(2XL) 2(3XL)
Onguard Tuftex chemical raincoats 48" length, on package: model #78040 Tag in coat 11201-1111	2 Med 2 Large 2 XL 4 2X 2 3X 2 4X
Onguard (green colored) over the shoe boots #87025 (stored in spill lockers & crib for assistance with spill clean ups)	2 M 2 L 4 XL 4 2XL
Onguard 17" Hazmax slicker 87050 (2 stored in Resin spill locker & crib for > size 13 feet)	2 Size 15
Maintenance **- Refer to MAI_P489 and OH list of approved non stored crib items**	
Oberon Hood Switch Pullers UV7-AF-C	108924

MT. CLEMENS APPROVED P.P.E. (CRIB ITEMS) - CHART 1	
EQUIPMENT DESCRIPTION	**SAP#**
Genco Thermal Suit (Maintenance only)	
Oberon Electrical Flash Suit	
Electrical - WH Sailsbury #3 20,000 volts	
Cold protection - Arc Surplus, Big Ben Denim Coats, Carhardt Coats and Coveralls, Workrite Insulated Nomex	Ordered through supervision
Welding Gloves - Tillman 1080 - 14" blue side split	
Emergency Services - Contact Emergency Services	
Helmets - Bullard	
Turn-out Gear - Lion Apparel	
Boots - Onguard grn/yellow steel toe	
SCBA - Scott, Survive-Air	
Tychem TK Level A Suit - Axalta Coating Systems Apparel	
Tychem ThermoPro - Level B	

P.P.E. GENERAL PLANT GUIDELINES - CHART 2

Equipment	Hazard	When worn
Safety glasses with side shields	Impact/flying fragments	All manufacturing, warehouse & lab areas of plant
Safety-toe shoes	Dropping tools equipment roll-over	All manufacturing, warehouse & lab areas of plant
Hard Hats	Impact/falling or flying objects	Construction areas as designated by Contract Administrator
Leather glove	Metal slivers other abrasions	Handling equipment, tools and drums
Neoprene coated (blue/black)	Chemical exposure	Wiping equipment and small cleaning jobs
Neoprene Best (black)	Chemical exposure	Equipment cleaning and extended solvent contact. Limited use with cold material.
Nitrile Non-Disposable	Chemical exposure	Limited use when handling small quantity reagents
Nitrile Disposables	Chemical exposure	Maintain cleanliness. General Hygiene
Face Shield (Nitrometer)	Flash fires	As directed by Mixer Loading Safety Guide. As indicated in AOP's
Chemical Goggles	Chemical splash/permanent damage to eyes	As indicated by S-code. As indicated in AOP's
Ear Plugs Ear muffs	Loss of hearing	As indicated in Plant Procedure and when noise causes discomfort
Nomex Uniform	Flash fire protection	As indicated in Nomex plant policy
Blue Tempro or White Tyvek full suit	Exposure to particulates	Pigment/powder loading
Synthetic Apron	Chemical splash to torso	As indicated by S-code
Synthetic raincoat	Chemical splash to torso/arms	As indicated by S-code
Synthetic Boots	Chemical permeation to feet	As indicated by S-code Spill clean up

PERSONAL PROTECTIVE EQUIPMENT (P.P.E.) - CHART 3

- **P.P.E "basics"**
- **"When is this P.P.E. not protective?"**

IMPORTANT NOTE:- Equipment must be replaced or repaired if the integrity has been compromised. Examples include:

- Tears or cracks in synthetic gloves
- Break-through and chemical permeation
- Non-chemical-resistant materials (e.g. leather) which has been soaked with chemicals
- Poor fit or other factors compromising the seal of an air purifying respirator (APR)
- Excessive scratches on the lens surface of safety glasses
- Poor visibility on visor of face shield, RACAL or other face protector (Note- visor replacements available)

EQUIPMENT		LIMITATIONS
Safety eye-glasses		No chemical protection
Safety-toe shoes		No chemical protection
Hard Hats (Bump hat)		Impact weight limited
Gloves:		
	Leather	No chemical protection
	Neoprene coated	Degrades quickly
	Lab disposables	Limited use, degrades
	Neoprene (Best)	Loss of integrity
Face shield		Irritant and corrosive vapors and splashes to eyes
Chemical Goggles		Splashes to face/head
Hearing protectors:		
	Ear plugs	Proper use, care & fit
	Ear muffs	Proper use, care & fit
Body Protection:		
	Tyvek	No liquid/flash protection
	Aprons	No arm/head protection
	Raincoats	No leg/head protection
	NOMEX	No chemical protection
Synthetic Boots		Loss of integrity
Respiratory Protection:		
	PAPR	Sufficient air flow, correct cartridge
	Half-faced APR	Correct cartridge, proper fit

CARE AND MAINTENANCE OF P.P.E. - CHART 4

- **HOW TO PUT ON (DON) AND TAKE OFF (DOFF) P.P.E.**
- **HOW TO PROPERLY CARE FOR AND STORE P.P.E.**

In all cases where integrity has been compromised, P.P.E. should be replaced through appropriate area procedures. Old and damaged P.P.E. should be disposed of as hazardous waste in appropriate containers. Also, in most cases, if contaminant is wet, P.P.E. may be wiped off with a disposable wiper before removing. **AVOID CONTACTING CONTAMINATED CLOTHING WITH UNPROTECTED HANDS WHEN DONNING AND DOFFING.**

Equipment	Don/Doff	Care/Storage
Safety glasses	Use ear pieces	Soft cloth lens cleaner avoid scratching lenses
Safety shoes	Avoid chemical contact	Clean off surface with soap and water. Store away from street clothing
Hard Hats	Use brim to don/doff. Adjust to fit snug	Clean with hot (140^0) water & detergent
Leather gloves	Do not contact outer contaminated surface. Use cuffs to don/doff	Do not use solvents to clean. Store away from street clothing
Neoprene coated (blue)	Do not contact outer contaminated surface. Use cuffs to don/doff	Dispose of when break-through occurs. Store with tool box or in P.P.E. locker
Neoprene Best (black)	Do not contact outer contaminated surface. Use cuffs to don/doff	Clean outer surface with solvent/Cuprin. Store with tool box or in P.P.E. locker
Nitrile Disposable	Do not contact outer contaminated surface. Use cuffs to don/doff.	Dispose of after every use
Face Shield	Avoid contaminating with soiled gloves. Use bottom clam-shell to don/doff	Clean clam-shell/visor with Cuprin. Replace sweatband. Replace visors when visibility poor. Store in P.P.E. locker.

CARE AND MAINTENANCE OF P.P.E. - CHART 4 - (con't.)

Equipment	Don/Doff	Care/Storage
Chemical Goggles	Avoid contaminating with soiled gloves. Use strap to don/doff. Use sides to adjust	Clean with hot water and soap w/soft cloth. Avoid warping or compromising fit when storing.
Ear Plugs	Avoid contaminating. Roll and compress plug. Insert plug into ear. Hold plug in place until expands to block noise.	Dispose of after use.
Nomex Uniform	Avoid chemical contact. Proper fit important. Always tuck shirt in (see Nomex procedure)	Store away from street clothing. Place soiled Nomex in proper container.
Tempro and Tyvek full suits	Avoid chemical contact. Attempt proper fit.	Dispose of after use.
Synthetic Apron	Avoid contaminating inside of apron. Use neck strap to don/doff keeping away from face and head. Secure ties for snug fit and ease of removal.	Clean outer surface w/hot soap & water. Store away from street clothing. Fold to avoid contaminating inside or hang up
Synthetic Raincoat	Avoid contaminating inside of coat. Secure all fasteners	Clean outer surface w/hot soap & water. Fold to avoid contaminating inside or hang in P.P.E. locker
Synthetic Boots	Avoid contaminating inside of boots. Use upper side loops to don/doff	Clean outer surface with solvent/Cuprin followed by hot water. Store in bottom of P.P.E. or spill locker

GOGGLES VS. FACE SHIELD SELECTION - CHART 5

Task	Goggles	Face Shield	Examples
Fill totes to drum	None	None	
Sampling or pumping from pressurized lines/systems	Yes	Yes	Header Systems to open pails or tubs
	Yes	None	Samples from pumps
First Break,			
Lines	Yes	Yes	Penetration of lines By mechanical means
High Temp-Resin	Yes	Yes	
Hot Water-FMF	Yes	Yes	
Pail Filling	Yes	None	From pumps and FSI
Gravity Liquids, transfer,			
$\geq$ S-3	Yes	None	Pail or drum filling
Pail to Pail	None	None	
Drum to Pail (S-2)	None	None	
Open Loading, any opening $\geq$ 4"	$\geq$ S-3 only	Yes	
Non-Laboratory Solvent Bath	Yes	Yes	Cleaning Equipment
Laboratory Solvent Bath	Yes	No	
Tank Wagon/tote, sampling (valve)	Yes	No	
Routine breaking of:			
Lines- Disconnect	Yes	No	
FSI	Yes	No	
Strainer baskets	Yes	No	

NOTE: In all cases where goggles are specified, they must be worn. If additional protection is desired, a face shield may be worn over the goggles.

Chart 6 - WHERE DO WE NEED RESPIRATORS?

AREA	TASK	(V) VENT-DEPENDENT OR (M) MANDATORY	REQUIREMENT/ RECOMMENDATION
RESIN	HANDLING ≥ S-4	M **	MANDATORY USE
	SPILL CLEANUP	M	MANDATORY USE
	SUPER-SAC LOADING	M	MANDATORY USE
	SR-1/SOLVENT BATH	V ***	MANDATORY USE
DISPERSION	HANDLING ≥S-4	M **	MANDATORY USE
INCLUDES DISPERSION LAB	LOADING PIGMENT	M	MANDATORY USE
	SR-1/SOLVENT BATH	V ***	MANDATORY USE
	SPILL CLEANUP	M	MANDATORY USE
SOLVENTBORNE/ WATERBORNE LOADING	SPILL CLEAN-UP	M	MANDATORY USE
	HANDLING ≥S-4	M **	MANDATORY USE
	SR-1/SOLVENT BATH	V ***	MANDATORY USE
	LOADING PIGMENT	M	MANDATORY USE
SOLVENTBORNE/ WATERBORNE FILLING	SPILL CLEANUP	M	MANDATORY USE
	SR-1/SOLVENT BATH	V ***	MANDATORY USE
LAB	HANDLING ISOCYANATES	M	MANDATORY USE
	HANDLING ≥S-4	V **	MANDATORY USE
	Spill Clean up	M	Mandatory use
	HAND SPRAYING	M	RECOMMENDED and MANDATORY if hand spraying for an hour or greater in a single shift.
PUMPERS	HANDLING & TRANSFER OF ≥ S4	M **	MANDATORY USE
	SPILL CLEANUP	M	MANDATORY USE
SHIPPING/RECEIVING	SPILL CLEANUP	M	MANDATORY USE
MAINTENANCE	SR-1/SOLVENT BATH	V ***	MANDATORY USE
	WORKING ON EQUIPMENT CONTAINING ≥ S4	M **	

** THESE TASKS REQUIRE THE USE OF A POWERED AIR PURIFYING RESPIRATOR SEE OCCUPATIONAL HEALTH OR PSM RESOURCE FOR MORE INFORMATION ON EQUIPMENT AND TRAINING.

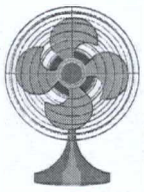
V - VENTILATION DEPENDENT-MEANS THAT THE SOLVENT BATH MUST BE EQUIPPED WITH LOCAL EXHAUST AND THE VENTILATION SYSTEM MUST BE OPERATING. THE VENTILATION MUST HAVE BEEN SHOWN VIA MONITORING RESULTS TO BE "ADEQUATE" AS DEFINED IN THE SITE HAZCOM PROGRAM.

*** IF AN EMPLOYEE WILL BE AT THE SOLVENT BATH GREATER THAN 15 MINUTES, A RESPIRATOR SHALL BE WORN.

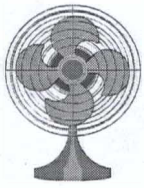
CHART 7 **LAB S-CODE**

S-1



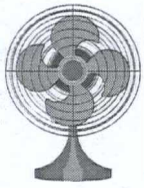


S-2

S-3



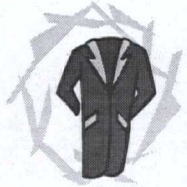



S-4





S-5


S-6




NOTE: LAB COATS ARE A RECOMMENDED PRACTICE BUT THEY ARE NOT CHEMICAL PROTECTIVE CLOTHING

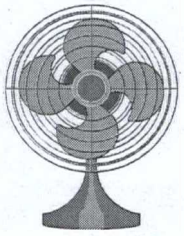
Chart 8

LABORATORY S CODE CHART KEY

Gloves (reference Lab Hand Protection Guide)

Goggles

Adequate Ventilation



Lab Coat

Respirator

Fume Hood

NOTE: LAB COATS ARE A RECOMMENDED PRACTICE, BUT THEY ARE NOT CHEMICAL PROTECTIVE CLOTHING.

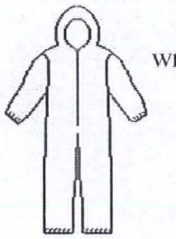
GLOVE TYPES :

(1) 'NITRILE' DISPOSABLE GLOVES - (Blue)
(2) WHITE COTTON GLOVES (with cuffs)
(3) LEATHER GLOVE
(5) YELLOW Reversed Kevlar TerryBest 14" OVEN GLOVE
(6) GREEN NITRILE RUBBER / 'SOLVEX' - CHEMICAL / SOLVENT RESISTANT GLOVES
(7) NEOPRENE "BEST" CHEMICAL RESISTANT GLOVE

RECOMMENDED GLOVE TYPE FOR TASK

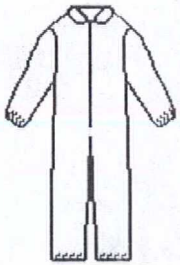
TASK TO BE PERFORMED:	GLOVE TYPE RECOMMENDED					
	1	2	3	5	6	7
1) USING SCALPEL / STANLEY KNIFE OR SCRIBING PANELS						
2) HANDLING PANELS WITH CUT EDGES						
3) HANDLING TEST PANELS, PREPARATION OF E/COAT THROW BOXES		Dry work only				
4) HOLE PUNCHING IN PANELS						
5) CUTTING LARGE SHEETS OF METAL, HANDLING LARGE BODY PANELS (ESPECIALLY WITH JAGGED EDGES)						
6) REMOVING HOT ARTICLES FROM OVENS						
7) REMOVING COLD ARTICLES OR PANELS FROM FREEZER (eg CYCLIC CORROSION TESTS)						
8) HANDLING CORROSIVE MATERIALS (ACIDS AND BASES)						
9) PREPARING AND HANDLING PIGMENT CONCENTRATES	Light Work					
10) HANDLING ORGANIC SOLVENTS - SUBMERGED						
11) HANDLING GENERAL RESIN / PAINT SAMPLES INCLUDING E/COAT AND OTHER WATERBORNE PAINTS	Light Work					

Chart 10



Axalta Coating Systems Tyvek, Style: TY127S, Color: white Coverall has a zipper front, attached hood with elastic around face, elastic wrists and ankles.

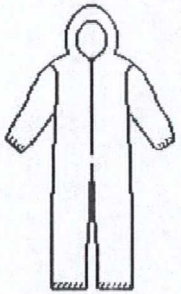
Tyvek coveralls with the hood attached *are not allowed in production areas. Only the white tyvek without hoods are allowed in production areas. Refer to Section 3 E.* White Tyvek *should never be in direct contact with the skin.*



Axalta Coating Systems Tyvek, Style: TY125S, Color: white Coverall has zipper front and collar, elastic around wrists & ankles.

Since these Tyvek are not treated with flame retardant, (refer to Section 3 E), *they must be worn over Nomex clothing when used in production areas.* If a head covering is desired, Nomex hoods are available in the crib.

**Only to be used in the production area for loading small particulate materials (i.e. micas etc.) that are able to get through the blue Tempro coveralls



Tempro, Style: TM127S , Color: blue Coverall has zipper front, attached hood with elastic around face, elastic wrists and ankles.

Tempro® - Fabric is treated to provide fire retardant and liquid repellency characteristics. Garments made of Tempro® are intended to provide secondary fire retardant protection and are to be worn over inherently flame resistant garments (Nomex).

Axalta Coating Systems Tyvek lab coats, Color: white. Lab Coat has front snap closure, elastic wrists.

Tyvek lab coats *are not allowed in production areas.*

3/2010

AXALTA COATING SYSTEMS
OPERATING PROCEDURE

MSDS for any hazardous material(s) used in this procedure are available via computer.

SOC & Design Basis Database
Safety and Environmental Controls

TITLE: SPILL CLEAN UP

DATE OF ISSUE: 1/1996
NEXT REVIEW: 1/2015
REVIEW FREQUENCY: 1 YR

PREPARED BY: S. RIDELLA
REVISED BY: DENISE TRABBIC-POINTER
REVIEWER: RONALD G. NELSON
APPROVER: RODNEY MAIER

PROCESS ENG:
EHS RESOURCE:

ATTACHMENTS INCLUDED:
ATTACHMENT 1 - SPILL CART LOCATIONS
ATTACHMENT 2 - SPILL CART SUPPLIES
ATTACHMENT 3 - EQUIPMENT INSPECTION PROCEDURE
ATTACHMENT 4 - PROPER USE OF TORNADO WET VAC

PURPOSE: TO GIVE GUIDANCE ON PROPER SPILL CLEAN-UP.

SPECIAL P.P.E. / TOOLS REQUIRED: ESD SAFETY SHOES, SAFETY GLASSES WITH SIDE SHIELDS, NOMEX CLOTHING, RESPIRATOR OR PAPR, SYNTHETIC BOOTS AND OTHER PER S-CODE.

LEGEND

 = CRITICAL PROCESS STEP

= SAFETY CAUTION

REASON FOR REVISION: UPDATE TORNADO WET VAC CLEANING PROCEDURE & EDITORIAL CORRECTIONS

11/4/00 (D. TRABBIC-POINTER) - ANNUAL REVIEW - UPDATE APPROVER LIST, UPDATE PPE REQUIREMENTS, ADD LEGEND WITH APPROPRIATE SIGNS, ADD PHA INERTING AND GROUNDING INFORMATION TO SECTION III, ITEM 4, UPDATE AOP CLARIFYING WHAT TYPE OF SPILLS CAN/CANNOT BE CLEANED UP BY AREA PERSONNEL.
12/5/01 (D. TRABBIC-POINTER) - ANNUAL REVIEW - ADDED METHANOL TO MITIGATION CHART, CLARIFIED SAFETY RESPONSIBILITIES DURING SPILL, REVISED SPILL CART AND STORM SEWER INSPECTION PROCEDURE, REVISED WET VACUUM DRUM HANDLING AND WASTE DISPOSAL PROCEDURE AND SMALL CHANGES THROUGHOUT DOCUMENT.
1/10/03 (D. TRABBIC-POINTER) - ANNUAL REVIEW - ADDED SECTION PERTINENT TO HAZMAT TEAM. UPDATED SPILL ENTRY CRITERIA AND CHANGED RESPONSIBILITY AND INSPECTION OF SEWER COVERS, ADD NEW SECTION IX (ITEM 6)
2/5/04 (D. TRABBIC-POINTER) - ANNUAL REVIEW - REMOVED ATTACHMENT 6 AND REFERENCE TO AREA RESPONSIBILITY FOR SEWER COVER MAINTENANCE.
10/20/05 (D. TRABBIC-POINTER) - ANNUAL REVIEW - UPDATE ATTACHMENT 1
10/20/06 (D. TRABBIC-POINTER) - ANNUAL REVIEW - ADDED INFORMATION THROUGHOUT TO INCORPORATE EXPANDED LAB. ADDED OTHER CLARIFYING INFORMATION
9/20/07 (D. TRABBIC-POINTER) - CHANGED SPILL LOCKER INSPECTIONS TO EACH SHIFT; ADDED FIRE PUMPHOUSE SPILL LOCKERS; CLARIFIED WHO TO CALL WHEN CONTRACTED RESPONSE IS REQUIRED.
10/07/08 (L. PLATT) ANNUAL REVIEW - ADDED ACID TO SECTION 8 MITIGATION RESPONSIBILITY AND FLOW CHART (D. TRABBIC-POINTER)
8/20/09 (L. PLATT) ANNUAL REVIEW - ADDED ENVIORNMENTAL CONTROLS & SITE SAFETY CONTROLS. (D. TRABBIC-POINTER) CHANGED REFERENCE TO "FIRST LINE SUPERVISORS" TO "SHIFT LEAD". CONFIRMED AND CHANGED SPILL LOCKER LOCATIONS AND CONTENTS. REMOVED SPILL CART AUDIT FORM AND REQUIRE USE OF TIE-WRAPS FOR SPILL CART.
1/28/10 (D. TRABBIC-POINTER) - REVIEWED DOCUMENT AND UPDATED THROUGHOUT.
1/2011 (L. PLATT) - ANNUAL REVIEW, ADDED MSDS LINK
1/2012 (L. PLATT) - ANNUAL REVIEW - R.NELSON - Added site header information
10/2012 - SENDING FOR UPDATES- (D TRABBIC-POINTER) ADDED IDLH LANGUAGE PER 2ND PARTY AUDIT.
1/2013 (C. MEAKEM) - ANNUAL REVIEW, MINOR FORMATTING.
1/2013 (R.MAIER) - MINOR LANGUAGE ADDITION
1/2014 (C. MEAKEM) - SCRUBBED DUPONT FROM PROCEDURE; SENDING OUT FOR ANNUAL REVIEW

I. PURPOSE / APPLICABILITY

1. The purpose of this AOP is to convey the general principles, organization and procedures for spill clean-up at the Mt. Clemens and Toledo sites. Included are:

   A. The roles of the different site spill response personnel during an incident,
   B. Initial internal reporting (get help through security),
   C. Mitigation procedures (contain the spill/stop the source),
   D. Detailed clean-up procedures.

   Although the detailed clean-up procedures are geared to spills inside the plant walls, the general principles and procedures are equally applicable to spills outside of the building. The procedures were written to ensure that any spill is contained/cleaned-up (in the safest possible manner) and has the least possible impact on personnel, the site, and the environment.

II. IMPORTANCE OF SPILL CLEAN-UP

1. A spill of flammable material could ignite and destroy most or all of the plant with loss of life and jobs.

III. PHILOSOPHY OF SPILL CLEAN-UP

1. A safe / quick spill clean-up requires a military command type situation with absolute clarity of who is in charge. Two people have overall responsibility on the scene.

2. One "senior" fire officer of the plant fire brigade will be appointed **EMERGENCY RESPONSE TEAM FIRE OFFICER.** This person will be in charge of safety related issues at the spill scene.

3. The **SHIFT LEAD is** in charge of the equipment or facility will be responsible for spill control, mitigation, clean-up, and reporting.

4. If Mt. Clemens Fire Department responds, they assume the lead for all subsequent activity.

NOTE: **THE FIRE OFFICER IN CHARGE HAS ABSOLUTE AUTHORITY ON SAFETY DURING A SPILL EMERGENCY. SAFETY INSTRUCTIONS FROM THIS PERSON MUST BE OBEYED DURING SPILL RESPONSE AND HAVE PRECEDENCE OVER CONFLICTING INSTRUCTIONS.**

IV. DIAGRAM DESCRIPTION

1. The Spill Response Operations Diagram outlines the roles and responsibilities of the different spill response personnel during a spill incident.

2. Under OSHA's Hazardous Waste Operations and Emergency Response regulation (often called HAZWOPER) only employees that are trained in the hazards of the materials they work with and how to respond to a release of those materials can perform spill clean-ups. Employees of the Axalta Mt. Clemens Plant receive initial and annual training on the hazards of the materials they work with and are trained annually in response to spills. However, some of the materials and certain circumstances may dictate that employees should not attempt to clean-up a release due to increased risk or specialized safety precautions. The Mitigation Responsibility Decision Process diagram is a tool for the **Shift Lead** and the **Emergency Response Team Fire Officer** to assist in determining the type of spill response and whether "area employees" or other specialized personnel such as the Hazmat Team or contracted responders are needed. Hazmat Team personnel have received extended training on this "decision process" and should be consulted.

   Note that the release must be mitigated by personnel familiar with the equipment. Mitigation of a release means that the flow has ceased and the spill is somewhat contained and an employee does not have to enter in order to shut off flow or cover a sewer or drain opening. Once the spill has been mitigated, area personnel may perform clean-up activities.

3. For purposes of spill clean-up, "area personnel", means all employees within the defined production or service area where the spill has occurred. Defined areas of the plant are as follows:

   - Paint Manufacturing - includes Dispersions, Intermediates, Charging, FSO and Filling in both solvent and waterborne areas.
   - Resin Manufacturing.
   - Shipping and Receiving - includes Resin Drum Warehouse and outside areas of the plant where employees typically deliver and store materials.
   - Laboratories - Polymer and Ecoat labs are considered as being separate as they handle products not normally handled by other lab technicians.
   - Maintenance - materials typically used in Maintenance may include items other than paint/solvent such as lubricating oil, Therminol and water treatment chemicals.

IV. DIAGRAM DESCRIPTION CON'T

Note that small releases in the Resin Storage Area may be cleaned up by any employee familiar with the hazards of the particular material as long as the material or size of the spill is not excluded in Section VIII, Item 3 and only if the release has been mitigated. The decision to do so is at the discretion of the **Shift Lead and Emergency Response Team Fire Officer** in charge of the spill clean-up. Hazmat Team personnel should be consulted in all cases.

3. There are several criteria set for determining the need to contact "non-area" clean-up personnel which include, but are not limited to:

   A. Large spills beyond the capabilities of available area personnel (e.g. vacuum truck required > 2 gallon spill inside laboratories) or spills of non-conductive solvents.

   B. Materials with an S-code > 4, a total H+F+R+S code >10, or a product with an H-code of 4.

   C. Materials such as acids, amines, monomers, isocyanates, chlorinated materials, or aluminum pastes (needs neutralization/kill solution or requires special handling).

   D. Any spill located in a confined space.

   E. Any materials that are M-coded and/or contain $\geq$ 0.1% lead, nickel or $\geq$ 0.1% formaldehyde.

   F. Any materials containing H-41, Methanol.

   G. Any release to the environment (e.g. sewers, soil, and vapor cloud).

   H. Any spill where measured volatile levels exceed 1000 ppm.

   NOTE: Contact the Environmental Coordinator in all cases that meet the above criteria.

   See Mitigation Responsibility Decision Diagram.

4. For a large or particularly hazardous spill/release that escalates into a major incident (injury, offsite impact, fire, government agency involvement, etc.), the **Shift Lead** and the **Emergency Response Team Fire Officer** may elect to

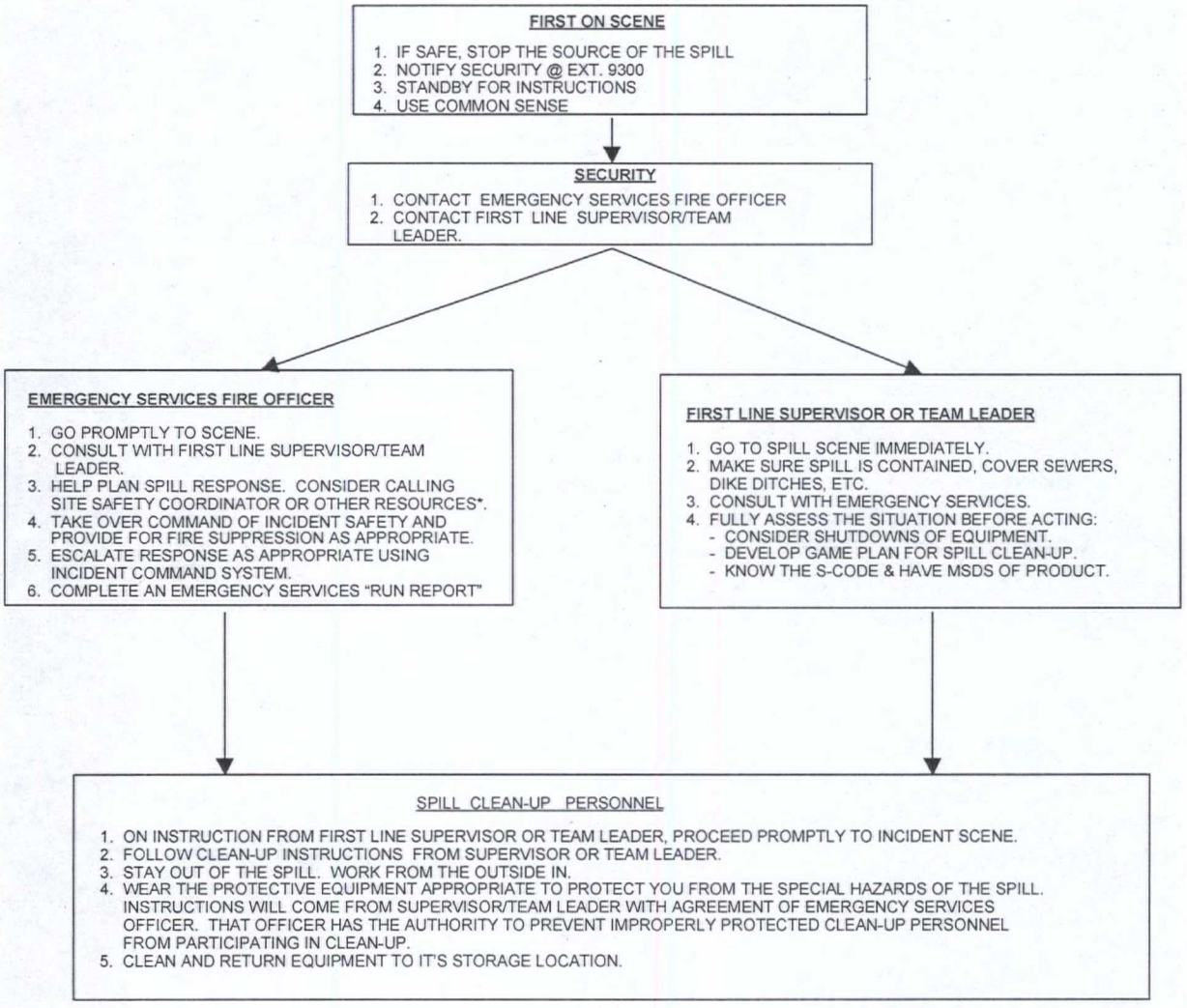
IV. DIAGRAM DESCRIPTION CON'T

initiate the plant "Incident Command System". See plant Disaster Control Manual SAF_P013 for details.

NOTE: Emergency Response Team personnel must monitor all of the above situations and have additional training and additional criteria to determine safe entry into the spill. If monitoring indicates levels above the set criteria, personnel performing clean-up must leave the spill area until levels are reduced to acceptable levels.

Note: Only responders in breathing air may enter atmospheres that are immediately dangerous to life and health (IDLH). Examples of IDLH atmospheres include: Carbon Monoxide ≥ 1,200 ppm, Carbon Dioxide ≥ 40,000 ppm, and Formaldehyde ≥ 20 ppm. n-Hexane, the chemical used to calibrate the VOC sensor on our response monitors, has an IDLH of 1,100 ppm [LEL]. That means that if an atmosphere indicates ≥ 1% LEL, it is possible that there is > 1,100 ppm VOC. Our policy dictates that no one enters an atmosphere with ≥ 0 % LEL. We also have criteria that people in respirators cannot work in atmospheres ≥ 1000 ppm. Our policies are protective in either case. A list of chemicals and their corresponding IDLH criteria is available in the NIOSH Pocket Guide of Hazardous Chemicals.

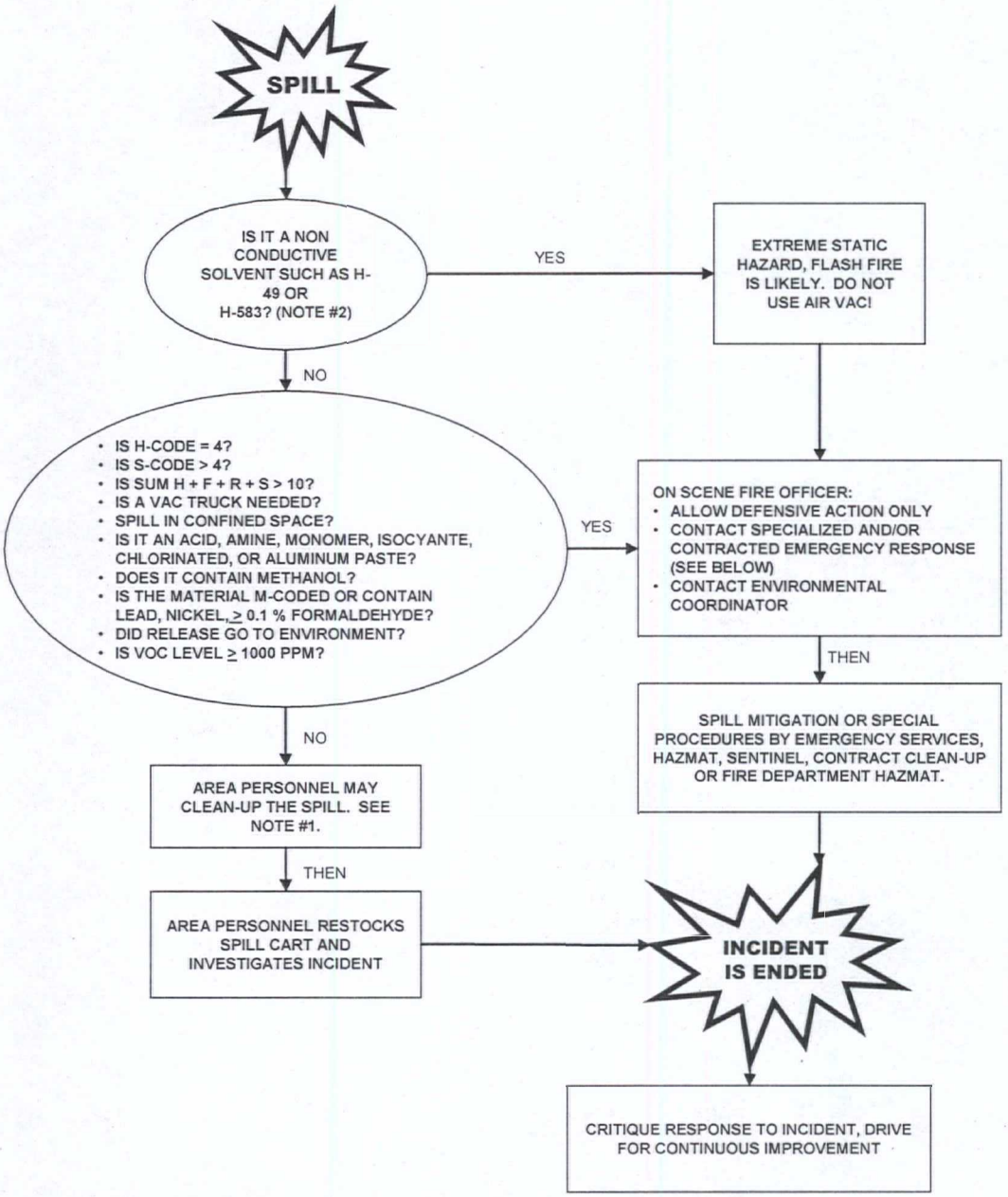
SPILL RESPONSE PLAN OPERATIONS DIAGRAM



***Potential Critical Resources**

- Health & Environmental Coordinator
- Safety Coordinator
- Maintenance
- Chemist
- Engineer
- Hazmat

MITIGATION RESPONSIBILITY DECISION PROCESS



NOTE #1: S-CODE IS THE MINIMUM ACCEPTABLE PPE, FIRE OFFICER HAS AUTHORITY TO REQUIRE ADDITIONAL PPE FOR CLEAN-UP CREW

NOTE #2: REFER TO "s:\COMMON\PUB-SAFETY&ENVIRONMENTAL\MT. CLEMENS SITE NON-CONDUCTIVE MATERIALS"

V. INDIVIDUAL ROLE DEFINITIONS

NOTE: THIS SECTION DETAILS THE ROLE (RESPONSIBILITY, AUTHORITY LEVEL, EXPECTATIONS) FOR EACH PERSON INVOLVED IN A SPILL

1. First-On-Scene

A. Action steps in a spill (First-On-Scene)

1) Shut off source of the spill and de-energize any surrounding equipment **if it is safe to do so.** Stay out of the spill itself to avoid fire and slipping hazards. If necessary close valves at storm sewer stormceptors and/or put spill covers over sewers or other sources that the spilled material could possibly get into. The spill must be contained on site. Deny entry into the spilled area until Emergency Response Team members are present.

2) Notify Security or pull the nearest fire alarm. Call security on 9300 and say "this is ___." (Be sure to include the area you are from and your function) "There is a spill in the ___ area. Please notify **Emergency Response Team** and the **Area Supervisor.**"

B. If a fellow operator is available you may want to get them to call while you are shutting off the source.

C. If you discover a spill in a different area than you normally work (outside the building or during a night shift) it is important that Security is notified right away so that the appropriate personnel can be brought to the scene ASAP.

D. Standby for instructions.

The **Shift Lead** and the **Emergency Response Team Fire Officer** will arrive on scene. Standby to explain the spill to them and follow their directions and no one else's

E. Use common Sense.

Not every possibility can be anticipated. If an unusual situation arises, deal with it appropriately.

NOTE: PROTECTING YOURSELF AND OTHERS COMES BEFORE PROTECTING PLANT PROPERTY.

V. INDIVIDUAL ROLE DEFINITIONS CON'T

2. **Security**

NOTE: **SECURITY IS TO IMMEDIATELY CONTACT THE EMERGENCY RESPONSE TEAM FIRE OFFICER AND THE APPROPRIATE SHIFT LEAD. THIS MUST BE ACCOMPLISHED NO MATTER WHAT BARRIERS ARE ENCOUNTERED.**

NOTE: **SECURITY HAS AVAILABLE THE PLANT EMERGENCY CALL IN LIST TO CONTACT OTHER SUPPORT PERSONNEL.**

A. Action steps in a spill (Security)

1) Contact EMERGENCY RESPONSE TEAM FIRE OFFICER and if for some reason they can not be contacted, manually trigger the fire alarm to summon help.

2) Contact SHIFT LEAD of the area.

3. **Shift Lead**

NOTE: **THE SHIFT LEAD IS IN COMMAND OF THE CLEAN-UP ACTIVITIES, PROVIDES CLEAN-UP EQUIPMENT/PERSONNEL, AND MAINTAINS ADEQUATE SPILL CLEAN-UP EQUIPMENT/SUPPLIES IN THEIR AREA. THE SHIFT LEAD CAN PROVIDE CLEAN-UP PERSONNEL FROM THEIR OWN CREW OR FROM OTHER CREWS WITHIN THE WORK AREA AS DEFINED IN SECTION VIII, ITEM 2.**

NOTE: **IF FOR ANY REASON AN EMERGENCY RESPONSE TEAM FIRE OFFICER IS NOT AVAILABLE, THE SHIFT LEAD OR AN APPROPRIATE DESIGNATE WILL ASSUME ALL SAFETY RESPONSIBILITIES.**

NOTE: **THE SHIFT LEAD MUST ALSO PREVENT THE SPILL FROM CONTAMINATING THE ENVIRONMENT AND BECOMING A GOVERNMENT REPORTABLE INCIDENT. THE ENVIRONMENTAL COORDINATOR IS AVAILABLE FOR ADVICE ON THIS POINT.**

A. Action steps in a spill (**Shift Lead**)

1) Go to spill scene immediately without delay. On the way begin formulating your plan. Verify that the source of the spill is shut off. Check that sewers or other sources of escape are blocked to prevent the spilled material from leaving the site.

V. INDIVIDUAL ROLE DEFINITIONS CON'T

2) Consult with **Emergency Response Team Fire Officer** and work together to plan the best method to clean-up the spill.

NOTE: **THE FIRE OFFICER IN CHARGE HAS ABSOLUTE AUTHORITY REGARDING SAFETY DURING THE EMERGENCY PERIOD. YOU MUST OBEY SAFETY DIRECTIONS.**

3) Consider shut down of adjacent equipment for safety. Sparks from adjacent equipment could be an ignition source. Consider what to shut down, if anything.

4) Get adequate personnel for the clean-up. It is your responsibility to get the spill cleaned up. You must find the personnel from the work area as defined in Section VIII, Item 2 of this procedure.

5) It is your responsibility to tell people what to do, and to give orders. There is plenty of advice available on the scene. Listen to experienced people.

6) Order bystanders to leave if they are impeding activities or causing risk to themselves or others.

7) Audit equipment cleanliness and spill cart contents. Restock spill carts according to recommended quantities in **Attachment 2** & **seal carts with tie-wraps** for use in case of future spills.

8) If sewer covers were used, assure that they are cleaned and replaced.

9) Complete spill incident investigation immediately after the incident has concluded. Investigate the cause and determine future preventive actions.

10) Fill out a report in the **Incident Investigation Reporting System** in ManageIT Central (MitC). Do this as a group with key people involved in the spill and clean-up. Be sure to include any recommendations for improving emergency response in the future. It is important to enter all spill

information into MitC as soon as possible. This includes;

V. INDIVIDUAL ROLE DEFINITIONS CON'T

a. Size of spill

b. Type of material spilled

c. Equipment involved

d. Location of spill

(1) Did the spill get into sewers or on soil or any off site impact?
(2) Did the spill result in a non-precautionary evacuation?
(3) Did the spill result in a non-precautionary process shutdown?
(4) Were any government agencies notified or involved?

e. Who performed the clean-up?

f. Was the fire brigade or others actively involved?

g. Size of clean-up area (approximate square feet)

h. Any waste generated?

(1) How much?
(2) How was it disposed of?

11) The plant Environmental Coordinator will determine if the spill is an Environmental Incident, and if so, determine the proper category.

V. INDIVIDUAL ROLE DEFINITIONS CON'T

4. Emergency Response Team Fire Officer

NOTE: THIS KEY POSITION WAS CREATED BY THE PLANT STAFF TO SEE TO IT THAT NO ONE GETS HURT. IN THIS POSITION YOU HAVE FULL AUTHORITY OVER ALL ACTIVITIES, EQUIPMENT AND PEOPLE DUE TO YOUR LEVEL OF TRAINING / EXPERTISE. DO NOT HESITATE TO GIVE ANYONE SAFETY ORDERS REGARDLESS OF THEIR RANK. DETAILS OF HOW TO DO THIS ARE BEYOND THE SCOPE OF THIS AOP. EMERGENCY RESPONSE TEAM FIRE OFFICERS DEVELOP THAT EXPERTISE AS PART OF THEIR TRAINING IN EMERGENCY RESPONSE TEAM ACTIVITIES.

A. Action steps in a spill (Emergency Response Team Fire Officer)

1) Go promptly to the scene.

2) Consult with the **Shift Lead** at the scene. Work together and plan the best method to clean-up the spill. Hazmat Team personnel should monitor the spill area and must be consulted to determine if safe entry is possible (see Section IX, Item 6). The Emergency Response Team Fire Officer may release Hazmat Trained (Technician Level) Emergency Response Team members to help area personnel with the clean-up or perform the clean-up if, in his/her judgment, there is insufficient area personnel available or the hazard is too great for area personnel and there is sufficient Emergency Response Team members available for fire suppression. Consider calling other resources for consultation or assistance.

3) Notify the city of Mt. Clemens fire department if required.

NOTE: THE PLANT HAS AN AGREEMENT TO NOTIFY THE CITY OF MT. CLEMENS FIRE DEPARTMENT FOR ALL SPILLS WHERE EMERGENCY RESPONSE TEAM ARE PAGED-OUT (FIR A003).

4) Take over command of safety and fire suppression.

5) Write Emergency Response Team Incident Report ("Run" Report)

5. **Emergency Response Team Member**

NOTE: THE PRIMARY ROLE OF THE FIRE BRIGADE IS FIRE PROTECTION.

V. INDIVIDUAL ROLE DEFINITIONS CON'T

A. Action steps in a spill (Emergency Response Team Member)

1) Follow direction of Emergency Response Team Fire Officer.

6. **Hazmat Team**

Note: Hazmat Team personnel report to the shift Hazmat Chief who, in turn, reports to the Emergency Response Team Fire Chief. The primary responsibility of Hazmat is assessment of the spill area for safe entry by Fire Brigade and/or cleanup personnel. The first criteria is to assure the atmosphere does not contain volatile levels (LEL) of vapor and second is to assure personnel entering the spill area are wearing proper respiratory protection. Hazmat is trained in appropriate equipment and monitoring techniques and will work with the Emergency Response Team Fire Chief and Shift Lead to setup and barricade the spill.

A. Action steps in a spill (Hazmat Team)

1) Report to the scene.

2) Work with the **Emergency Response Team Fire Chief** and the **Shift Lead** to setup the "hot zone" and to barricade the spill area using appropriate monitoring equipment and techniques.

3) Assess the spill area following guidelines established and outlined in Section VIII of this procedure to determine who may perform spill cleanup and the appropriate PPE for those entering the spill. Communicate your findings with the **Emergency Response Team Fire Chief** and the **Shift Lead**. Contact the Environmental Coordinator if questions.

4) Continue to monitor spill area throughout cleanup process and until detected levels remain below established criteria.

5) If the spill included use of sewer covers, assure that the area has cleaned and replaced the covers to the appropriate storage tube(s).

6) Assist Emergency Response Team Fire Chief with incident report and critique of response to the spill.

V. INDIVIDUAL ROLE DEFINITIONS CON'T

7. **Clean-Up Personnel**

A. Action steps in a spill (Clean-Up Personnel)

1) Put on protective equipment. Additional basic PPE that each person is responsible to have in the area and to bring to the spill is listed below.

a. Nomex Clothing

b. Splash Goggles if material is $\geq$ S3

c. Respirator or PAPR with organic vapor cartridge and particulate pre-filter

2) Emergency clean-up equipment is located in carts on each floor. **See Attachment 1 for spill cart locations.** Generally you will find items listed below.

a. Aprons
b. Rubber boots
c. Rubber gloves

See Attachment 2 for additional spill cart materials.

3) The S-code of the spilled material and the material safety data sheet should be consulted in all cases. **Nomex clothing* and respirator are required in all cases where S>0.** Your **Shift Lead** will direct you as to protective gear needed.

***Lab personnel should also wear Nomex clothing if cleaning up > 2 gallons of flammable/combustible materials.**

4) Stay out of the spill; it can be ignited at any time. There is also a fume or slip hazard.

5) Contain the spill, and prevent the spill from spreading. Use absorbent, pigs, etc., to dike the spill.

6) Clean-up the spill. Heed these Do's and Don'ts listed below.

a. **DO** check air vacuums for condition and proper grounding.

b. **DO** work from the outside in and work from the same side as your fire protection. (This avoids the fire and slipping hazard of going into the spill puddle)

c. **DO** prevent spilled material from entering sewer or contaminating the soil. **(REPORT ANYTHING OF THIS NATURE TO THE ENVIRONMENTAL COORDINATOR).**

V. INDIVIDUAL ROLE DEFINITIONS CON'T

d. **DO** (If needed) only use conductive solvents such as KH-10630 or H6 (Butyl Acetate) and non-sparking tools for the clean-up.

e. **DO NOT** use alternate solvents (i.e. other than KH10630 or H6) without consulting the Environmental Coordinator.

f. **DO NOT** go into the spill puddle!

g. **DO NOT** do anything to make sparks or other ignition sources!

h. **DO NOT** drive electrical equipment into or out of a spill. Let it stand until cleaned up!

i. **DO NOT** put down solvent over more than a four foot by four foot area, if solvent is used to assist clean-up! (This reduces fire hazard)

7) Listen to the **Shift Lead.** Do not accept orders from bystanders. The **Shift Lead** is in control of the clean-up activities.

8) Clean and return or replace all equipment

a. Return or replace used spill cart equipment.

b. Sewer covers should be cleaned with solvent in a solvent bath. If a sewer cover is un-cleanable it should be replaced through Stores.

c. Air vacs can be cleaned by pumping the appropriate solvent through them. **See Attachment 5 for the air vac cleaning procedure.**

d. The air vac ball checks should be inspected and cleaned in a solvent bath if necessary.

9) Properly dispose of spill residue. Spill residues must be disposed of in accordance with the plant and area waste handling procedures.

NOTE: IF YOU ARE UNCERTAIN OF THE PROPER WASTE DISPOSAL DESIGNATION CONTACT THE ENVIRONMENTAL COORDINATOR.

8. **Environmental Coordinator**

The Environmental Coordinator is trained to assess what actions may need to be taken to prevent impact to the environment that may be a violation of law or Axalta policy. This person has knowledge of reportable quantities of chemicals and the information available to determine composition of spilled blends.

V. INDIVIDUAL ROLE DEFINITIONS CON'T

NOTE: THE ENVIRONMENTAL COORDINATOR ALSO ACTS AS AXALTA FACILITY EMERGENCY COORDINATOR AND CONTRACT ADMINISTRATOR FOR PRIMARY AND SECONDARY CONTRACT CLEAN-UP PERSONNEL. IN THIS ROLE THE ENVIRONMENTAL COORDINATOR MUST BE CALLED IN ALL CASES WHERE HazMat Environmental Group OR OTHER CONTRACTED CLEANUP OR RESPONSE PERSONNEL ARE REQUIRED. THE ENVIRONMENTAL COORDINATOR SHOULD MAKE THE INITIAL CALL TO CONTRACTED CLEANUP PERSONNEL TO ASSURE PROPER RESPONSE AND EQUIPMENT.

A. Action steps in a spill (Environ. Coordinator)

1) Assess environmental damage or potential. The **Environmental Coordinator** determines if there has been any impact on the environment or if there is any potential impact. If so this person advises the **Shift Lead** on what actions to take.

2) Determine need to report to appropriate agencies and/or Wilmington.

3) Report immediately if needed.

4) Report to the **Plant Manager** or **Public Information Officer.** (Keep them informed of any reports made to outside parties so they can be prepared to respond to questions.)

5) Responsibility includes:

a. Act as liaison and hazardous materials specialist for primary and secondary contracted emergency responders.

b. Assists with monitoring before and during entry to spill, directs the mitigation activities and consults with contractor to assess need for secondary back up.

c. Confers with **Emergency Response Team Fire Officer** on the need to call for additional personnel and equipment.

d. Confers with **Emergency Response Team Fire Officer, Hazmat personnel and Shift Lead** to assure proper protective equipment is being worn by clean-up personnel.

9. **Bystanders**

NOTE: BYSTANDERS ARE GENERALLY EXPECTED TO STAY OUT OF THE SPILL AREA. ANY BYSTANDER WHO FEELS THEY HAVE SOMETHING TO CONTRIBUTE TO THE SITUATION SHOULD MAKE THEIR SUGGESTIONS TO THE PEOPLE IN CHARGE.

A. Action steps in a spill (Bystanders)

1) Leave spill area.

VI. SPILL RESPONSE EQUIPMENT

1. EQUIPMENT DESCRIPTION

A. Each area is to have the following equipment immediately available for spill response:

1) Vacuum **(See Attachment 5 for Use Procedure)**

2) Sewer Covers

3) Spill locker/cart

4) Absorbent

It is strongly recommended that each area store the following equipment:

1) A minimum of one vacuum near each spill locker/cart.

2) A minimum of four bags of absorbent should be stored near each locker/cart.

NOTE: SEE ATTACHMENT 2 FOR SPILL CART INVENTORY LIST (MINIMUM RECOMMENDED ON CARTS).

2. SEWER COVERS

A. Sewer covers are managed as described in the Plant Integrated Contingency Plan (ICP). **A site map showing sewer cover locations is available from the Plant CAD Group.**

B. It is the area's responsibility to assure that sewer covers are present, in good condition and to order replacements when required. Sewer covers are also audited monthly by Emergency Response Team members.

3. EQUIPMENT LOCATIONS

A. **Attachment 1 outlines the current locations of the site's spill lockers/carts.**

4. EQUIPMENT INSPECTION

A. **Attachment 3 outlines the inspection procedure for the site's spill lockers/carts.** Included is a sample inspection form and instructions.

NOTE: SEWER COVER LOCATIONS ARE TO BE INSPECTED MONTHLY BY HAZMAT TEAM MEMBERS. ASSURE THAT LIDS ON SEWER COVER TUBES ARE LOOSE AND CAPABLE OF BEING REMOVED. ALSO ASSURE THE SEWER COVER IS PRESENT AND IN GOOD CONDITION. REPLACE IF REQUIRED.

VII. TRAINING

1. This AOP should be used to train all new employees in general spill clean-up procedures during new employee orientation.

2. Annual follow up training shall be conducted with this AOP during a monthly plant safety meeting.

3. Each area should conduct detailed training regarding area equipment/procedures.

VIII. MANAGEMENT SYSTEM

EMERGENCY RESPONSE TEAM is responsible for managing the spill clean-up system on our plant and is ultimately responsible for planning improvements and implementing these plans themselves or through other appropriate systems at the plant. Confusion often arises in such situations. Although this Team is ultimately responsible for following and making sure it is proper and correct, they may accomplish work through others as is logical.

1. Examples of what **EMERGENCY RESPONSE TEAM** will help manage are:

   A. Spill clean-up training.
   B. Critiques of response after a spill clean-up (SAF_P009).
   C. Recommending the proper spill response equipment.

2. **EMERGENCY RESPONSE TEAM** would not be expected to:

   A. Write up Incident Reports on spills.
   B. Manage spill prevention.
   C. Provide clean-up labor except in very unusual circumstances.

3. Examples of what each **AREA** will need to manage are:

A. Maintain, stock, and inspect spill response equipment. **See Attachment 3 for inspection procedure requirements.**
B. Provide clean-up labor. See Section VIII.
C. Ensure area personnel trained in use of appropriate equipment.
D. Write incident report on spills.
E. Spill Prevention

ATTACHMENT 1
SPILL CART LOCATION

LOCATION (DIRECTIONS FROM "PLANT NORTH")	CART "MARKING"
1) RESIN- GROUND FLOOR- "WEST" WALL "SW" OF RT-7 (BY EYE WASH EW-02)	RESIN DOWN
2) RESIN- 1ST FLOOR, RECEIVING WAREHOUSE BY DOOR ONE RECEIVING WAREHOUSE	REC/RESIN UP
3) PAINT MANF. 1ST FLOOR - "NORTH" WALL BY INTERMEDIATE TEAM ROOM	"NONE"
4) PAINT MANF. GROUND FLOOR- "SOUTH" WALL ACROSS FROM TANK FT-8	FILLING
5) FMF- 1ST FLOOR- "EAST" WALL BETWEEN 2442 AND 1244	FMF CHARGING
6) FMF- GROUND FLOOR, "NW" CORNER OF ROOM, BY TANK W-2402	"NONE"
7) SHIPPING- "WEST" OF SHIPPING OFFICE BY AISLES H & I, ACROSS FROM "SOUTH WEST" TRUCK BAYS	SHIPPING
8) RCRA BUILDING - NORTHWEST SIDE	RCRA
9) EAST AND WEST FIRE PUMPHOUSES	PUMPHOUSE (EAST OR WEST)

NOTES:

- "REC/RESIN UP" SPILL CART SHARED WITH RECEIVING AND RESIN
- PIGS BY RESIN UNLOADING
- PAINT MANF. "CHARGING" SPILL CART SHARED WITH 1ST FLOOR DISPERSION
- PAINT MANF. "FILLING" SPILL CART SHARED WITH GROUND FLOOR DISP.

ATTACHMENT 2
SPILL CART SUPPLIES

INVENTORY/REORDER LIST

QUANITY:	UNIT OF:	PART RECOMMENDED:
2	BOXES	WORKHORSE WIPERS
2	PACKS	SWEAT BANDS
2	ROLLS	DUCT TAPE
2	ROLLS	MASKING TAPE 1-½"
2	ROLLS	BARRICADE TAPE-"DO NOT ENTER"
1	BOX	HMIS LABELS-8" X 8"
6	EACH	FACESHIELD HOLDER
6	EACH	FACESHIELDS
3	EACH	BROOM HEADS
3	EACH	BROOM HANDLES
2	EACH	BRASS SCRAPERS
2	EACH	BRASS SCRAPER HANDLES
1	BOX	WIPES FOR RESPIRATORS - NON-ALCOHOL
10	EACH	SAMPLE BOTTLES
2	BOXES (12)	GLOVES 6784R BEST
5	EACH	BRASS SQUEEGEE
3	EACH	ALUMINUM SHOVEL (ORDER FROM FAIRMONT FROM STORES)
5	EACH	MOP HANDLES
5	EACH	BRASS MOP CLAMPS
1	BOX	MOP HEADS

NOTE: THIS LIST IS THE MINIMUM RECOMMENDED TO BE IN THE CARTS.

ATTACHMENT 3
EQUIPMENT INSPECTION PROCEDURES

A. Frequency and responsibility

1. Spill carts shall be inspected after use in a spill event and during each shift. The daily shift spill cart inspection should be performed at the beginning of each shift and essentially consists of confirming that the tie-wrap remains in tact. If the tie-wrap has been removed, the contents must be inventoried and items replaced as needed. Attach a new tie-wrap once the spill cart is fully stocked.

2. The spill cart landlord is responsible to see that the inspection occurs on a timely basis.

B. Principles

1. Personal protective equipment is to be stored fully serviceable, clean and protected from contamination.

2. Tools are to be made of spark proof, non-plastic materials, stored fully serviceable & clean.

C. Comments

1. Avoid improvised, substitute PPE, and tools. Example reasons for this include:

   Some plastic bristle brooms and brushes are static producers and therefore, not acceptable in this service. Use only natural bristle brushes.

2. Tools made of carbon steel can produce sparks which may provide an ignition source and are therefore not acceptable in this service.

D. Procedure

1. **Use the inspection form format provided on Attachment 4.** Landlords may change the appearance of the form or add to the form. The suggested form is intended as a guide and contains the minimum essential information.

2. Inspect the cart first. Look for sharp edges, pinch points and poorly supported doors, inoperative or missing brake. Cause deficiencies to be repaired using the work order system in SAP (TW21).

3. Inspect the contents of the cart. Look for deficient quantity, unserviceable conditions, missing parts, incorrect items, or stored dirty. In addition for PPE, examine how and where it is stored. PPE must be stored so that prolonged storage will not cause the item to become unserviceable.

   a. For example: goggles stored outside a protective box and at the bottom of the cabinet under the shovel heads will damage the goggles from dirt accumulation and deform them from the weight of shovel.

ATTACHMENT 4
PROPER USE OF TORNADO WET VACUUM

PURPOSE: OUTLINE A SAFE PROCEDURE FOR THE USE OF THE TORNADO VAC.

NOTE: DO NOT USE AIR VACS TO CLEAN-UP SPILLS OF NON-CONDUCTIVE SOLVENTS

SPECIAL P.P.E./TOOLS REQUIRED: NOMEX CLOTHING, SAFETY SHOES, SAFETY GLASSES, AND OTHER PPE AS WARRANTED BY HAZARD CLASS OF MATERIALS HANDLED, FOUND ON THE MSDS/HMIS SHEETS.

INTRODUCTION

1. The Tornado Vacuum is an air driven unit which mounts on the top of a 55 gallon black open-top drum. This unit is for clean-up of liquid spills, water, solvents, flammable liquids, intermediates, and finished product, etc.

2. Determine hazard of material from MSDS/HMIS sheets and obtain the appropriate PPE to perform the task. Hazmat officer may assist.

PREPARATION

1. Before using equipment, check grounding cables and clamps, the points should be sharp enough to penetrate any coating on the drum, and the cables must be in good condition, no broken or frayed wires.

2. Connect the grounding clamps to the tab on the top of the vacuum, use the U-bolt on the under side of the drum and ground cart to steel beam. Plug air line into the air unit, turn valve for air on.

FOLLOW PROCEDURE TO CLEAN-UP SPILLS!

ONCE COMPLETED

1. When the drum is full, it must set for 5 minutes before the vacuum unit is removed and the drum is closed up. This will allow for relaxation of any electrical charge which might have accumulated in the liquid.

2. If the spill was a flammable material and does not contain water, the drum(s) may be pumped at SR-1. If it is a water-based product, label with appropriate code and HMIS and contact the Environmental Coordinator for proper disposal.

3. **Do not label as a hazardous waste and only label if material remains inside the drum.**

CLEAN EQUIPMENT & STORE IN PROPER LOCATION

1. Once spill is cleaned up, the vacuum must be cleaned. **FOLLOW THE GROUNDING PROCEDURE, (SEE AOP #PLT_A009).** Use the appropriate solvent (SEE BELOW) to flush the unit for 10 to 15 minutes.

   NOTE: IT IS EXTREMELY IMPORTANT TO USE ONLY CONDUCTIVE SOLVENTS WHEN FLUSHING THE AIR VAC. RAPIDLY FLOWING LIQUID CAN BUILD A HIGH STATIC CHARGE AND THE VAC IS PULLING IN AIR CONTAINING OXYGEN. A SPARK DURING VAC FLUSHING COULD CAUSE AN EXPLOSION.

   Inspect hose, wand, and squeegee for cleanliness. The air vac ball checks should be inspected and cleaned in a solvent bath if necessary. Clean top of the vacuum, place on a black open-head drum and return to proper storage location.

2. The appropriate solvent used to clean the air vac depends on the type of material that was spilled and cleaned-up. An incompatible solvent could cause the material to gel and increase the clean-up task.

   NOTE: USE OF SOLVENT OTHER THAN KH10630 IS DISCOURAGED AND SHOULD NOT BE NECESSARY. USE OF ANY CONDUCTIVE SOLVENT OTHER THAN KH10630 MUST BE APPROVED BY THE HAZMAT CHIEF ON-DUTY OR BY THE ENVIRONMENTAL COORDINATOR.

   Use a conductive solvent compatible with the material to be cleaned from the vac. Your product chemist or process engineer can help you with special cases.

   Some common conductive solvents are:
   H-12, H-18, H-30, H-35, H-41, H-44, H-962, H-69, H-90, H-224 & KH-10630

   Avoid using non-conductive solvents such as:
   H-49, H-85, H-423, H-425, H-583, H-596, H-601
   Mineral Spirits (H-165, H-416, H-446, H-453, H-461, H-471, H-632)

   More information on non-conductive solvents can be found in AXALTA Engineering Standard DE3H and DE4H, AXALTA Reactor Safety Manual Appendix, AXALTA Flammable Material Handbook and NFPA 77.

   NOTE: THE COMPOSITION OF KH-10630 IS MONITORED BY THE PLANT ANALYTICAL LAB TO ENSURE A CONDUCTIVE MIXTURE.

   When in doubt seek help from Emergency Response Team- Hazmat or the Environmental Coordinator.

AXALTA COATING SYSTEMS
OPERATING PROCEDURE

AOP: OCH_A001
AREA: OCCUPATIONAL HEALTH

TITLE: OCCUPATIONAL HEALTH PROGRAM MANAGEMENT

			AUTHORIZATION SIGNATURE & DATE
ORIGINALLY DATE OF ISSUE:	9/9/02	PREPARED BY:	D. TRABBIC-POINTER
DATE OF LATEST REVIEW/REVISION:	1/2014	REVISED BY:	R. SCHMITZ
		APPROVER:	D. BERGEON
		EHS:	R. SCHMITZ N/A

DATE TO BE REVIEWED: 1/2016

REVIEW INTERVAL: 1 YR. X - 2 YRS. 3 YRS.

ATTACHMENTS INCLUDED: NONE

REASON FOR REVISION: NEW AOP.
7/7/03 (D. TRABBIC-POINTER) - UPDATED RESPONSIBILITY SECTION IV, WRITTEN PROGRAM LIST SECTION V, AND UPDATES OTHER UPDATES THROUGHOUT DOCUMENT.
9/9/03 (D. TRABBIC-POINTER) - NEW AOP (FORMALLY SAF_A034 - 9/28/99)
3/1/06 (A. DECKER) - 2 YEAR REVIEW - UPDATED TO REFLECT NEW PROCEDURE CODES.
2/21/08 (R. SCHMITZ)- 2 YEAR REVIEW UPDATES TO SECTIONS IV, VI, VII,
1/2010 (R. SCHMITZ) - 2 year review, Updated header, Toledo included. RACAL
2/23/2010 (R.Schmitz) - RACAL - Breathe Easy I Respirator - SAF_A006 has been deleted, no longer used on site.
1/2012 (R. SCHMITZ) - BI-ANNUAL REVIEW - NO CHANGES
1/2014-(T.ALEXANDER) -2 YEAR REVIEW-

PURPOSE: TO OUTLINE THE OCCUPATIONAL HEALTH MANAGEMENT PROGRAM AT THE MT. CLEMENS AND TOLEDO FACILITY.

SPECIAL P.P.E. / TOOLS REQUIRED: NONE

I. RESPONSIBILITY

It is the responsibility of all members of the Plant to comply with the activities, documented procedures and work instructions defined within the stated scope of this AOP for the Mt Clemens and Toledo sites. It is also the responsibility of the user to identify any part of the procedure that the user feels may be incorrect. Users are expected not to deviate from this procedure, (except in emergency situations), until the proposed change or changes has or have been documented, reviewed, approved and the users have been instructed in the change. No hand written changes to this procedure are permitted.

II. P.P.E. & ADDITIONAL EQUIPMENT REQUIRED

P.P.E.: None
ADDITIONAL EQUIPMENT: None

III. PROGRAM OBJECTIVE

The AXALTA COATING SYSTEMS Mt. Clemens and Toledo sites are committed to maintaining a safe and healthful work environment for all site employees with the ultimate goal of preventing occupational injuries and illnesses. An effective occupational health management program is an important element in achieving that commitment.

The following is a description of the necessary elements needed to manage an effective OH program and how those elements are managed at the Mt. Clemens and Toledo facility.

Items in Italics are mandatory as prescribed by AXALTA COATING SYSTEMS Guideline S1T, Occupational Health Management.

IV. ORGANIZATION/MANAGEMENT

Line management …shall implement this standard to maintain an effective OH program that protects people from the harmful effects of workplace OH hazards.

An OH resource trained according to Section 5.5 shall be available to advise and train the OH team in developing and maintaining an effective OH program.

The OH Resource maintains training as required by Section 5.5. The PSM Team is also responsible for portions of the OH Program and therefore must maintain required training in accordance with specific program standards (e.g. Respirator Program Manager, Corporate Standard S2H).

IV. ORGANIZATION/MANAGEMENT - CON'T.

Mt Clemens and Toledo Plant roles and responsibilities in respect to OH management are defined as follows:

- The OH Resource is the key site contact for all OH-related topics. Responsibilities include assuring that the Program meets all of the elements outlined in Corporate Standard S1T and in this site-specific procedure. Continued anticipation, evaluation and suggested control of health hazards present in the workplace is also the responsibility of the OH Resource.

- The SHE Manager has Staff-level responsibility to assure that upper management remains committed, involved and supportive of OH programs and activities. This includes the motivating force and organizational and financial resources necessary to eliminate hazardous exposures and resultant occupational illnesses. The SHE Manager advises and counsels line management in evaluating and categorizing occupational illnesses and injuries.

- Line Management is responsible to assure that their respective organizations are properly trained and aware of OH programs and associated procedures. This includes the training, documentation and enforcement of SBU and site policies, standards and procedures as they apply to OH.

- Medical located at the Mt Clemens facility is responsible for all required medical surveillance associated with OH programs and for coordinating with area supervision to assure all employees are covered as appropriate. Medical is also responsible for assisting in investigations regarding employee illness and/or injury including work relationship potential. All employee medical records are maintained by site Medical Department. Medical also assists in many wellness programs such as smoking cessation and annual wellness evaluations.

- Mt Clemens and Toledo employees are responsible for following and adhering to plant OH policies, standards, and procedures.

All employees shall be given the opportunity to be involved in OH programs and teams. All employees shall carry out their assigned responsibilities in a way that maintains a healthy workplace.

IV. ORGANIZATION/MANAGEMENT - CON'T.

Members of the PSM Team take an active role in OH efforts such as annual employee fit testing and respirator training, and involvement with the OH-Ergonomic Team activities. The site expanded Ergonomic Team also includes employees from each plant operating area. Area Trainers also are familiar with and include OH topics when training employees that are new to the area.

V. WRITTEN PROGRAMS

The OH program shall be documented and communicated to all personnel. The program shall establish clear goals and objectives, including eliminating incidents and exposures that could lead to illness or injury.

Site standards and operating procedures shall address pertinent OH hazards and shall be kept up-to-date.

The following are current OH-specific procedures at the Mt. Clemens and Toledo Plants:

- Hazard Communication Program - OCH_A005
- Authorization for Purchase & use of New Chemicals at Mt. Clemens - PLT_A008
- Accessing Material Safety Data Sheets - SAF_A028
- Hazardous Materials Handling & Personal Protective Equipment - SAF_A008
- Respirator Protection Program - SAF_A027 and OCH_P005
- Hearing Conservation & Noise Control Program - OCH_P003
- Mt. Clemens Monitoring Program - OCH_P002
- Medical Surveillance Program - OCH_P012
- Bloodborne Pathogens Exposure Control Plan - OCH_P006
- Mt. Clemens Ergonomic Program - OCH_A008
- Mt. Clemens Heat Stress Program - OCH_P011
- Occupational Health Program Management - OCH_A001
- Indoor Air Quality Program - OCH_P010
- Ventilation & IAQ Program Management OCH_P015
- NARF Program - OCH_P001
- Asbestos Compliance Procedure SAF_A035
- Food Control & Sanitation Program - OCH_P004
- Laser Program - OCH_P014
- Pandemic Plan OCH_P007
- Mercury Control Plan ENV_P027
- Thermal Stress OCH_P011

The above procedures are reviewed by all site employees on a regular basis. In addition, Tol_A064, Acrylonitrile handling is a Toledo specific program.
Employees sign-off once coverage is completed.

In addition to the above procedures, area operating procedures (AOP's) for individual process tasks indicate health hazards and

PPE specific to the respective tasks. The OH & S Specialist reviews and signs all site AOP's to assure that health hazard potential is effectively assessed and controlled.

VI. OH HAZARD COMMUNICATION AND TRAINING

As required by applicable regulations, personnel shall be notified of the dangers of the chemical, physical, ergonomic, and biological hazards to which they are potentially exposed. Labeling, posting, material data safety sheets, and hazard training shall be done per corporate standards and regulations.

Personnel who work with chemicals AXALTA COATING SYSTEMS has determined to be known or probable human carcinogenic or developmental, reproductive, or germ cell mutagenic hazards shall receive special documented hazard notifications annually.

Personnel shall be trained on the policies, standards, and safe work practices for the OH hazards to which they are potentially exposed. Training shall be verified and documented as required by regulations and corporate standards.

Personnel shall receive all training or certifications required by regulations (e.g. asbestos, lead, emergency response, hazardous waste, radiation).

OH RESOURCE TRAINING

Personnel shall serve as an OH resource only after they have received the training necessary to competently do this job.

The OH resource has received adequate training and receives annual updated training as is necessary.

INITIAL EMPLOYEE TRAINING

The following is the current curriculum for OH topics for new employee orientation.

- Brief overview of OH responsibilities and how to contact.
- The basic outline of the site Hazard Communication Program is used because it covers most all of the appropriate issues. The general outline is as follows:
  - * Location of the written Hazcom Program
  - * How to read and understand HFR labels and when to use them
  - * How to read and interpret MSDS
  - * How and where to access health hazard information. This includes a short lesson on computer access to MSDS

VI. OH HAZARD COMMUNICATION AND TRAINING - CON'T.

  * Physical and health hazards that are specific to routes of entry (i.e. inhalation, absorption, ingestion). Examples are also given of the general impact of common site chemicals on target organs and how to find that information.
  * Methods of detecting hazardous materials are discussed such as odor but more focus is given to monitoring and the methods used on site.
  * General hygiene, work practices and basic hazardous materials handling considerations (AOP OCH_A005 and SAF_A008).

- How to protect the routes of entry by the proper use of PPE. Discussions of S and M-codes and what they mean, what products used at this site carry an "M" for protective equipment designation, and any specific associated handling procedures are described.

- The site contact and eyeglass policy is covered with an emphasis on side-shields.

- General ergonomic information is reviewed with some discussion of proper lifting and who to see if ergonomic issues are noted.

- Hearing Conservation and Noise Control is covered using the most recent data and findings. There is a review of which plant areas fall under the Hearing Conservation Program and where hearing protectors may be required. The affects of noise on hearing are also discussed. Medical Department administers the initial base-line audiogram and explains the use of earplugs at that time.

- Respirator program requirements for respirator use.

- The name of the site competent person for asbestos is given and they are told in general that a survey has been performed, asbestos and non-asbestos insulation is labeled, and that regular inspections are conducted in order to confirm that no asbestos is in disrepair.

- Food Control & Sanitation reviewed.

- Thermal stress precautions are reviewed.

- Indoor Air Quality is addressed for reporting concerns and factors that affect IAQ.

- Pandemic Planning resource is explained.

- The Laser and Mercury program have general requirements explained.

VI. OH HAZARD COMMUNICATION AND TRAINING - CON'T.

ANNUAL TRAINING

The following programs are covered annually in site monthly Safety Meetings and in written procedure reviews:

- Hazard Communication/Medical Access
- PPE and Respiratory Protection
- Hearing Conservation and Noise Control
- Ergonomics

Hazardous chemical communications that do not have impact for all areas are handled by either OH Bulletins or by area operating procedures (AOP's). Refer to Haz Com folder in OH files.
Hazardous chemicals used at the Mt Clemens Plant that require annual coverage include Asbestos and Formaldehyde. Of those, Asbestos is the only chemical that impacts the entire site. Periodic reminders on the effects of exposure to Formaldehyde are given in annual site safety meetings and in conjunction with Hazcom. The procedure Lab_A067 for Isocyanate Handling and Spray Out that includes health hazards is reviewed annually. Isocyanate handling and hazard training is performed periodically (about every three years) for Resin, Laboratory and Maintenance employees using vendor training information and a video presentation.

DOCUMENTATION/FILE RETENTION

All monthly Site Safety Meeting training is documented and files maintained by Employee Relations Training Resources. The Training Resource also maintains a summary description of the curriculum for the specific topic. In most cases, annual OH training topics are reviewed and documented by site OH resources and an outline of the training is on file. Curriculum for initial training for OH topics is maintained in the OH Resource office files and is described in this Procedure. Initial employee training records are maintained in the Employee Relations Office in personnel files.

VII. OH HAZARD EXPOSURE ASSESSMENT

Assessment of workplace hazards shall be made to determine if unhealthy conditions and exposures exist that could lead to illness or injury.

VII. OH HAZARD EXPOSURE ASSESSMENT – CON'T.

The exposure assessment program for chemicals is described in the Monitoring Program OCH_P002. Assessments for noise are described in OCH_ P003, for ergonomics in OCH_A008, and for heat stress in OCH_P011.

AXALTA COATING SYSTEMS AEL's take precedence over consensus limits, but local regulatory limits must be adhered to if they are more stringent than the AEL. The AEL Committee shall be consulted if an exposure limit is not available for a chemical or there is doubt about the validity of an exposure limit or the adequacy of control measures.

Monitoring strategy, including establishing homogeneous exposure groups; applying area, personnel, or biological monitoring; and evaluating results, shall be done according to AXALTA COATING SYSTEMS Corporate Standard S12T by or under the guidance of OH resources to ensure its validity and cost effectiveness. Monitoring and analysis of samples shall be done by trained personnel. Sample analysis shall be done by qualified/accredited laboratories.

Homogeneous exposure groups have been identified and assessed for the various hazards posed at the Mt Clemens and Toledo Plant. The respective procedures mentioned above describe the systems used to perform appropriate sampling, assessment and evaluation of employee exposure. Logan is a computer program that aids in statistical evaluation for specific hazard exposure groups (HEG).

VIII. OH HAZARD CONTROL

Workplace exposures shall be maintained at a safe level through…effective measures…to control chemical, ergonomic/heat and cold stress, indoor air quality, noise, ionizing and non-ionizing radiation, biological, and other OH hazards identified in assessments.

Corporate standards and regulations shall be followed to control OH hazards and provide detailed requirements, including respirators, chemical protective clothing, and food control, sanitation and housekeeping. PPE shall be properly selected, tested, documented in procedures, used, maintained, and audited. Users shall be properly trained in PPE use and limitations.

The controls used at the Mt Clemens and Toledo Plant are also described in the respective procedures including ventilation controls. Ventilation design considerations are outlined in engineering projects. Maintenance procedures and preventive maintenance schedules also cover the documentation and care of the various exhaust and supplied-air systems.

VIII. OH HAZARD CONTROL - CON'T.

Ventilation flow studies and reports are normally performed by contract employees on an annual basis. The OH Resource maintains oversight of ventilation program records (e.g. flow readings and design drawings) and reviews all initial and design upgrades for ventilation systems. Project and design change procedures include a checklist that requires OH sign-off on any projects that may impact ventilation systems.

Personal protective equipment is assessed and selected based on all available pertinent information specific to the associated hazards. This assessment and evaluation is performed by the OH Resource on a broad basis for the various exposure groups and then on a task-specific basis during area procedure reviews. Initial and ongoing assessments are documented and maintained in OH files and become part of plant and area procedures. Training on proper use of PPE is handled as described in Section IV.

IX. OH METRICS

OH incidents shall be recognized, reported, investigated, corrected, and tracked as required in AXALTA COATING SYSTEMS Corporate Standard S3Y.

The SHE incident report and follow-up procedure SAF_A013 shall be used for OH incidents.

Mt Clemens and Toledo has several OH-related choices available in the incident investigation system. The investigation system also prompts the user for OH information such as PPE and incidents involving chemical spray or splash to an employee receive follow-up by site OH resources. Any incident involving an injury or illness would also be closely scrutinized for OH-related elements. OH incidents are also investigated and documented in various OH files. For example, in cases where monitoring results indicate over-exposure, immediate communication is sent to the affected area in order to quickly address the problem with administrative controls (e.g. PPE and barricading) and also to suggest future engineering control.

Potentially work-related illnesses shall be recognized, classified, investigated, and managed in accord with AXALTA COATING SYSTEMS Standard S35G.

Potential work-related illnesses are recognized and investigated by site Medical and the area supervision with assistance from the OH resource when required. Line Management has ultimate responsibility for classifying work-related illnesses and is aided in this process by safety, health and medical resources as necessary.

X. NEW PROJECT REVIEW

OH hazards shall be considered for new projects during process hazard analysis, along with safety, PSM, and other concerns.

An OH checklist is available for use during PHA, DCA and Pre-op reviews. It takes into account and prompts engineers to think about OH hazards and considerations in the design stage and prior to employee use. In the case of DCA's and project design, there is a summary checklist that is required to be included in the design package. The checklist prompts for yes/no answers and where "yes" is indicated OH signoff is required. A new project "Gate Review" checklist has been developed for use during project pre-screening to assess whether SHE-related issues need to be considered during the design phase. OH is included in this checklist and OH resources are included in Gate Review meetings.

XI. AUDIT/REVIEW REQUIREMENTS

OH hazards must be covered in first party (e.g. work team, unit, site level) SHE audits and inspections to ensure compliance with site, business, and corporate standards and local regulations. Second party, independent audits shall be done to verify compliance and effective management systems.

Safety audits performed in each area of the site include OH topics. In addition, the OH Resource regularly attends safety audits to assure that special emphasis is given to occupational health issues in plant operating areas. SAF_A004 describes the site safety audit process.

AXALTA COATING SYSTEMS
OPERATING PROCEDURE

SDS for any hazardous material(s) used in this procedure are available via computer.

SOC & Design Basis Database
Safety and Environmental Controls

TITLE: **EMPLOYEE EMERGENCY ACTION PLAN - FIRE, EXPLOSIONS, RELEASE OF FUMES, VAPORS AND OTHER EMERGENCIES**

DATE OF ISSUE: 01/14/99

PREPARED BY: S. R. Landis
REVIEWER:S.LANDIS
APPROVER: S. LANDIS
PROCESS ENG: S. LOPER
EHS RESOURCE:R.J. MAIER

ATTACHMENTS INCLUDED: APPENDIX A - FIRE ALARM BOX LOCATIONS; APPENDIX B - EMERGENCY EQUIPMENT LIST & LOCATIONS

REASON FOR REVISION: UPDATE PROCEDURE FORMAT, NORMAL REVIEW. UPDATE CONTACTS AND PHONE NUMBERS. UPDATED FROM #19-A
10/19/06 - UPDATE FOR NEW VOICE ADT FIRE SYSTEM
02/25/08- UPDATE TO MT CLEMENS PROCEDURE SYSTEM. NO CHANGES
02/17/09 - (R. HAEFNER) - NORMAL REVIEW, CHANGE REFERENCE TO TOL_A004, SEC III, 3
9/16/09- (T. ALEXANDER) - CHANGE REFERENCE TO SEC III,3 TO PLT_A003
2/10 -(T. ALEXANDER) - ANNUAL REVIEW-PROFILE UPDATED- CONTACT INFO. UPDATED
7/2011 (T. ALEXANDER) - ANNUAL REVIEW,(D. TRABBIC-POINTER) UPDATED ALTERNATE EMERGENCY CONTACT INFORMATION

7/2012-(T. ALEXANDER)-ANNUAL REVIEW-ADDED - MSDS,SOC, AND ENVIRONMENTAL LINK
7/2013- (T.ALEXANDER)-ANNUAL REVIEW-SCRUBBED DUPONT FROM PROCEDURE
10/2013 - (BRIAN WOODS)-REVISE FIRE EXTINGUSHER CHECKLIST
10/2014 (T.ALEXANDER) -OUT FOR REVIEW

EMPLOYEE EMERGENCY ACTION PLAN - FIRE, EXPLOSIONS, RELEASE OF FUMES, VAPORS AND OTHER EMERGENCIES

PURPOSE: THE PURPOSE OF THIS PLAN IS TO PROVIDE INFORMATION THAT IS TO BE USED BY EMPLOYEES DURING FIRE AND OTHER SITE EMERGENCIES PER OSHA 1910.38 AND HAZARDOUS WASTE REGULATIONS OAC 3745-65-50 THROUGH 3745-65-54 AND 3745-65-56.

SPECIAL P.P.E. / TOOLS REQUIRED: NONE

LEGEND:

= CRITICAL PROCESS STEP

= SAFETY CAUTION

I. RESPONSIBILITY

It is the responsibility of all members of the Toledo Plant to comply with the activities, documented procedures and work instructions defined within the stated scope of the Axalta Coating Systems in Toledo, Ohio. It is also the responsibility of the user to identify any part of the procedure that the user feels may be incorrect. Users are expected not to deviate from this procedure, (except in emergency situations), until the proposed change or changes has or have been documented, reviewed, approved and the users have been instructed in the change. No hand written changes to this procedure are permitted.

II. P.P.E. & ADDITIONAL EQUIPMENT REQUIRED

P.P.E. (check off all that applies):

G. For S-2 and S-3

- ☐ Leather Gloves
- ☐ Face Shield
- ☒ Safety Glasses with side
- ☐ Synthetic Gloves
- ☐ Respirator or PAPR
- ☐ Splash Goggles
- ☒ Nomex Clothing
- ☒ ESD Safety Shoes
- ☐ Synthetic Apron
- ☐ Hearing Protection

H. For S-5 and S-6

- ☐ Fresh Air supply
- ☐ Synthetic Boots
- ☐ Synthetic Raincoat

NOTE: Other PPE as required by hazards of incident

III. SAFETY PROCEDURES TO BE FOLLOWED PRIOR TO PERFORMING THIS OPERATION

1. Refer to AOP #SAF_A008; HAZARDOUS MATERIAL HANDLING AND PERSONAL PROTECTIVE EQUIPMENT, for more information. Operators should familiarize themselves with the hazards of the materials and the proper P.P.E. needed for each task. Properties and material hazards are listed in the Material Safety Data Sheets (MSDS) which are accessible from the computer located

outside of the cafeteria. The proper P.P.E. requirements are illustrated on the S-Code posters throughout the area.

2. Precautions to be taken if exposure to chemicals should occur:

a. Personnel exposed to chemicals should always use the safety showers if any hazardous material is spilled on the body.

b. The eye wash station is used if the eyes are exposed to any material.

c. Follow-up medical attention is required.

3. Control measures to be taken if loss of containment occurs (i.e. any chemical release, leak or spill): Refer to PLT_A003, MT.CLEMENS CLEAN-UP, for more information.

4. Process Hazards Analysis confirms that proper grounding is the first line of defense against a flash fire (see the Plant Grounding Standard AOP # PLT_A009).

IV. PURPOSE

The purpose of this Plan is to provide information that is to be used by employees during fire and other site emergencies per OSHA 1910.38 and hazardous waste regulations OAC 3745-65-50 through 3745-65-54 and 3745-65-56. This plan covers designated action an employee must take to ensure their safety from fire and other emergencies.

V. SCOPE

This procedure outlines the plant organization, which is needed to deal with emergencies on and off the plant, and describes the individual responsibilities of each member of the disaster control organization. The goal of this emergency control plan is to:

- **prevent injuries**
- **minimize off-site impact**
- **minimize property damage**
- **minimize operation outage or downtime**

VI. ROLES AND RESPONSIBILITIES

All site employees are required to review the Plan annually. Documentation of their review will be recorded on Training Sign-Off Sheet and kept on file in the Mt Clemens document system with a record retention of three (3) years. All new employees are to be covered at their time of hire and the documentation of their coverage should be recorded as part of their new employee orientation in their employee file (see procedure TOL_P005, Toledo Training Procedure). All site employees, visitors and contractors are to follow the requirements of the emergency action plan. It is the responsibility of all employees to know and understand the emergency action plan, their role during an emergency and to be each other's keeper. It is also the responsibility of site management to audit all personnel in conformance to the requirements in their daily tasks. It is the

responsibility of the Site Supervisor to review the adequacy of the requirements every two years with input from other site employees.

VII. STANDARD CONTENT OF REQUIREMENTS

A. SPILLS - INSIDE AND OUTSIDE BUILDINGS

A response to a spill should be conducted as described in procedure PLT_A003 Spill Clean-up. This written procedure is for both the Mt Clemens and Toledo Site. The primary difference for the Toledo site is that there is no on-site emergency response organization and therefore the site is dependent on Toledo Fire Department in the event of a large release. Toledo employees are trained and able to respond to small releases. In the event there is a spill, spill kits are stocked and present in two key locations, including 1-G-Alleyway and the < 90-day RCRA container storage area in Building 64. A drawing indicating spill kit locations is included as Appendix C SITE DRAWING - EVACUATION ROUTE, RALLY POINT, EMERGENCY KIT.

In the unlikely event that a spill reaches the environment (defined as air, water and/or land), the Environmental Coordinator must be contacted to assure all appropriate notifications are made. A description of the process used to determine the need for notification is located in ENV_A002 - ENVIRONMENTAL RELEASE AGENCY NOTIFICATION SYSTEM.

B. FIRE, EXPLOSION AND HEALTH HAZARDS

The fire hazards at the site consist of a variety of Class IB and IC flammable liquids and Class II and III combustible liquids, including monomers. In high concentrations or on long exposure, the materials used on site, vapors and combustion products of some of the materials present health hazards (hazards of specific products are found referencing the MSDS, MSDS can be accessed using the desktop icon on the computer in the cafeteria Reference SAF_A028).Operations with these materials include storage in closed containers, pumping solvents, resins, monomers, peroxides and initiators to and from drums and storage vessels, limited cleaning of equipment using flammable liquids and the handling of bags of powders by charging them into reactors or other mix vessels. Ordinary combustible materials (i.e., wooden pallets, shipping containers, paper, etc.) are also present. The most likely ignition source for a fire would be electrical (i.e. fault in an electrical circuit or static). Explosion hazards could result from the decomposition of products or the incompatible mixtures of highly reactive products, excessive pressure, runaway reactions and vapor clouds.

C. FIRE, EXPLOSION AND HEALTH HAZARD COUNTERMEASURES

The site was designed and is operated and maintained according to OSHA, National Fire Protection Association, Building Code and Axalta Coating Systems Reactor Safety Standards which provide requirements for the safe storage and handling of flammable/combustible liquids, monomers, initiators, and peroxides. Materials are in closed containers, except during special processing conditions.

A high standard of housekeeping in all areas of the site (electrically classified areas and office areas) is essential to the prevention of

fires and explosions, and it is the responsibility of each employee to continually ensure that these standards are maintained.

D. WHAT TO DO WHEN A CONDITION IS DETECTED - REPORTING

1. SPILLS

As described in Section VII.A. above, if a small spill occurs that does not reach the environment, the employee should follow the basic procedures outline in PLT_A003 Spill Cleanup. In all cases, if other personnel and/or site management are on site, the operator at the spill should notify additional personnel and approach the cleanup in a planned/careful manner. If the release has gone to the environment or if the spill is large, immediate notification of the Toledo Site Manager and the Environmental Coordinator is required. If no other means of communication is available at the spill location and it is large, the person present at the spill should pull the nearest fire pull-box and then stay near the location for others to respond.

In case of a spill, dedicated clean-up equipment should be used. They are: Portable Air vacuum, (for conductive materials only) for powder spills _and the Spill Cart containing cleanup tools and materials. Both are located in 1-G Alleyway.

2. FIRES

In the event of a fire, first consideration is to avoid injury to personnel. When a fire is detected, no matter how small, proceed to the nearest fire alarm pull box and follow directions on the alarm box to activate alarm. Vacate the building at the nearest exit and proceed to rally point in the cafeteria.

In the event of a fire on the off shift activate the nearest fire alarm pull box, all personnel should then report to the cafeteria and initiate the emergency call in procedure of site management and direct the Toledo Fire Dept. to the scene upon arrival.

3. EXCESSIVE FUMES

Should excessive fumes (from a large spill or vapor cloud) develop in your area, warn others in your immediate area to leave and proceed to the nearest fire alarm box immediately and follow directions at the box to activate the alarm. Operators can also use the FCAP's, (Fire Alarm Control Panel, located in Cafeteria, ICR and Gatehouse), to notify the Fire Department of a spill by pressing the HAZMAT or VAPOR CLOUD BUTTON in the panel. The operator can also notify the Plant Guard and inform him that there is a release and the guard can press his HAZMAT, VAPOR CLOUD BUTTON at the FACP in the gatehouse. Spill clean-up procedures should then be followed (See Safety Procedure, Spill Prevention and Countermeasures Plan).

If you are using a lift truck and a spill occurs, turn the ignition off and leave the truck; do not drive the truck out of the spill until the spill is cleaned up.

4. MEDICAL

Should an individual require immediate medical assistance resulting from serious accidental injury or serious sudden illness (heart attack, unconsciousness, etc.) proceed to the nearest phone and dial 911. Explain the situation and ask for immediate help. Tell responder who you are and the location of the emergency. Stay with the individual until help arrives. Do not move the individual unless exposed to fire or excessive fumes.

Operators can also use the FCAP's,(Fire Alarm Control Panel, located in Cafeteria, ICR, and Gatehouse), to notify the Fire Department of a medical emergency by pressing the EMS BUTTON in the panel. The operator can also notify the Plant Guard and inform him that there is a medical emergency and the guard can press his EMS BUTTON at the FACP in the gatehouse.

E. FIRE FIGHTING

Small fires can often be extinguished with fire fighting equipment available near the scene, such as, a portable fire extinguisher, but it is essential that fire alarm activation not be delayed while an extinguisher is being used. Flammable liquid fires can get out of control in minutes and facilities have been lost because attempts were made to fight the fire with extinguishers rather than to immediately call the Fire Department.

Good judgment must be used in deciding to fight a fire or leave the building. If in doubt, **leave the building.** When using fire equipment, only use fire equipment for which you have been adequately trained. "Adequately trained", means that you have had documented, live, "hands-on", training where you actually extinguished a fire with an extinguisher within the past 3 years and refresher (classroom) training at least within the past year.

Keep an escape route open and have someone stand by to assist. If the fire is not brought under control after the first pass with the portable fire extinguisher, leave the building.

Re-entering the building is not permitted until the "all clear" is given by the Fire Department and Site Management.

E. WHAT TO DO WHEN AN ALARM SOUNDS - EVACUATION/ACCOUNTABILITY

1. ALARMS AND HOW THEY WORK

a. "A.D.T." fire alarm boxes are spread across the site. The Fire Alarm System has speakers that provide voice capability when a box is pulled and employees/contractors are instructed, by pre-recorded message, to evacuate their areas and go to the rally points. When a fire, serious spill, or other type disaster occurs, the employee on the scene should sound the nearest fire alarm box. In the event of a vapor release, discretion should be used so as not to assemble personnel at the source of the release. The employee pulling the alarm should remain at the box to alert personnel of the emergency. Upon hearing the alarm, the guard will immediately call the Toledo Fire Department.

2. LOCATION OF THE FIRE ALARM BOXES

(SEE APPENDIX A; Fire Alarm Box Locations.)

Voice alarm system activation will sound continuously until the guard is directed to silence by Site Supervisor/Designate.

Other plant alarms will be initiated by Site Management and executed by the Plant Guard using the ADT System microphone. He will announce (3) three times the nature of the alarm and response required from employees. Those include:

Tornado - evacuate to basement.

Site evacuation - Bomb threat

The A.D.T. Fire Alarm System has a battery back-up so that it will be operational if a power failure occurs. It also has wireless phone capability to notify ADT if phone lines are down. The plant guard will also use the voice system to notify the Plant of any impairments or emergency related information.

3. EMPLOYEE RESPONSE TO AN ALARM
All operators will evacuate the area under normal circumstances. Operators can attempt to fight "small" fires using hand-held fire extinguishers if the fire is very small and contained. See Section "D" for additional information.

If using hand-held fire extinguishers is unsuccessful, then all area shutdown requirements should be followed, if possible, then evacuate to the rally point and wait for the Toledo Fire Department.

Emergency shut-off switches for all solvent pumps in the plant are located on the north outside wall across from the old portable tote tank cleaning building, and any Emergency Shutdown buttons for E-Bldg or Tankwagon loading . When a fire alarm is sounded, the first person passing this emergency shut-off should push the red palm button. This will stop all solvent transfer pumps from operating.

4. EMPLOYEE RESPONSE TO A VAPOR CLOUD ALARM
A vapor cloud is a visible fog-like cloud, consisting of liquid droplets of solvent or monomer that has formed and moves as a unit. It is only dispersed as it cools and condenses on the floor, or is removed from the area by forced ventilation.

Invisible vapors from a spill or other source can be ignited, but the results are not as devastating as a vapor cloud ignition or detonation. A large fume or vapor release has disaster potential because it can envelop an area before the occupants realize that there is a problem. The fumes or vapors can be toxic, flammable or both. Large spills can generate dangerous vapor conditions. The following procedure should be followed in handling a fume or vapor release:

First choice - Activate the **Vapor Cloud Evacuation Alarm** located

T7 ICR, K-bldg North door, West dock near K-bldg, stairwell in J-bldg, on the north wall of 1-G-Alleyway by the overhead door going to the back dock. If the operator is in the ICR push the VAPOR CLOUD BUTTON in the ADT FACP.

Second choice - Pull the fire alarm if one is unable to safely activate the evacuation alarm. The need is to alert all people in the path of the fumes and to evacuate the affected area. If the release has resulted in a vapor cloud the following steps should be followed:

a. The resin operator should radio the guardhouse of the situation if he/she is equipped with a radio. See item 2., (Fire Alarm Box Locations), in the case that the operator does not have a radio, he/she should evacuate the area and notify the guard of the vapor cloud by phone when possible.

b. The guard in turn will advise all operators with radios of the dangerous situation and wind direction.

c. All employees should at this point report to the cafeteria for a head count.

d. Management/Designate will determine if a complete evacuation has been accomplished and take any steps to recover people from the area without placing employees at risk. Notify the Toledo Fire Department of results of head count for their information and response.

e. The entire plant has gone to the cafeteria because of the fire alarm being pulled, Management/Designate has to decide if an outside evacuation is needed or if the people are better off staying in the cafeteria but they should have an accurate head count before relocating anyone.

DO NOT TURN ON OR OFF ANY ELECTRICAL EQUIPMENT EXCEPT VENTILATION

SPECIAL NOTE - <u>UNDER NO CIRCUMSTANCES</u>:

- Should anyone enter or cross the vapor cloud.
- Do any repairs in the vapor cloud.
- Enter into the area without Management and Fire Department approval.

f. Caution must be taken before starting ventilation to ensure that flammable vapors are not directed toward an ignition source. Wind direction and wind speed can be determined by the wind recorder located in "K" Bldg. Control Room or the wind sock on the resin storage roof.

5. VISITOR RESPONSE TO AN ALARM

All visitors to the site, from contractor personnel, customers to the copier repair person, must receive basic instructions in the hazards of the site and the actions they must take when the fire alarm sounds. The visitor's host might simply tell the visitor:

- They are to move away from the building and gather at the gate house until they can be accounted for. If they are with an Axalta person they should follow the Axalta person to safety.

When the fire alarm sounds, all visitors and contractors in all areas of the site must leave immediately via an outside evacuation route to the gate house.

6. RALLY POINTS FOR FIRE ALARMS

Upon hearing a fire alarm, all employees should proceed, in an orderly fashion, to the cafeteria for head count except for:

- Contractors / visitors - report to gate house.
- If alarm is pulled and the cafeteria building is involved in the fire, the rally point for all employees is parking lot outside the gatehouse.

7. RALLY POINTS FOR SITE EVACUATION

The rally point for all personnel is parking lot outside the gatehouse.

8. RALLY POINTS FOR WEATHER EMERGENCIES

All personnel should rally in the resin basement.

F. DISASTER CONTROL ORGANIZATION

Please note that an "EMERGENCY CALL-IN LIST" is maintained for both the Mt Clemens and Toledo sites and is located on the server with an icon on everyone's computer desktop. This document is maintained by the Environmental Coordinator and is accessible to everyone as a "read only" document at \\Mcrs2\shared\WorkTeams\Plant Emergency Call-In List\Plant Emergency Call-In List.xls

Person	Responsibility
Home/Address/Phone Numbers Site Supervisor, Scott R. Landis Non-responsive Non-responsive Non-responsive cell home Alternate/Designate; Scott Loper 4430 N. Holland Sylvania Rd. Apt. 1328 Toledo, OH 43623 (734) 355-9833	Responsible for overall protection of personnel, building, equipment and the public and is a liaison between site and local fire department and/or news media. **1. Provides overall disaster control.** **2. Reports to the gate house with Radio and Disaster Kit** **3. Notifies Mt. Clemen's Plant Management and EHS Group of the event** **4. Site Contact with Toledo Fire Department.** **5. Initiates missing persons search, site evacuation, and all clear**
Site Coordination; Scott Landis Alternate/Designate; Scott Loper Off Shift; Reactor #7 Operator Off-site Environmental Resource: Rodney Maier Non-responsive Non-responsive	Organizes and directs all emergency control activities prior to, during and after an emergency. Normally he would be stationed at the main gate house where he/she can coordinate activities between groups. The Site Supervisor decides what steps should be taken, such as evacuating or shutting down operating facilities, initiating missing persons search, or sounding the "all-clear". All of the plant personnel have responsibility for keeping him/her informed and the coordinator must keep a good working relationship with the Toledo Fire Department. **1. Directs emergency control activities** **2. Reports to the gate house with Radio** **3. Monitors the status of systems and emergency activities** **4. Recommends proper methods for utilizing shutdown at the scene**

Person	Responsibility
Plant Security -	Secures the gates. He/she will direct the emergency vehicles to the scene and keeps the site streets clear so that there is an unobstructed route to the scene. He/she limits entry to authorized persons, registers all people who enter or leave the site. Security will contact local police so that roadblocks and traffic control measures can be taken to maintain access to site entrances. On the off shifts, the operators will initiate the call-in procedures to summon the disaster control organization and urgently needed outside agencies, such as medical services, fire department and police. Employees, outsiders and curiosity seekers may present a challenge since emergencies frequently draw crowds. Without control, the crowd might congregate close to the scene and thus, unnecessarily expose themselves to injury. Outsiders might block access to the site entrance if suitable control measures are not taken. **Stays in the gate house for directions.** **1. Secures gate, keeps streets clear.** **2. Limits entry into the site to authorized personnel and vehicles only.** **3. Directs emergency vehicles to proper location.**
Maintenance Coordinator; Plant Engineer Scott Loper	It is the Maintenance Coordinator's responsibility to maintain the continuity of water flow and fire pump operation for providing emergency lighting at the scene, for maintaining electric power for vital services, for restoring building, equipment, power and utilities, if damaged or disrupted. Serves as local liaison with other public utilities (electrical, water) for services. Also returns pull box and fire pump and security to original operating conditions after given the all clear by the Fire Department. Ensures that equipment and systems on heat-producing equipment is properly maintained to prevent accidental ignition of flammable or combustible materials. **1. Maintains site supply services, air, fire water, water, steam, heat, nitrogen, breathing air, electricity, etc.** **2. Restores services back into operation after the incident**

Person	Responsibility
Special Hazards Coordinator; Rodney Maier Alternate/Designate - Lab Operator	The Special Hazards Coordinator has the responsibility to advise the Protection Coordinator the possible chemical or vapor hazards, which may be present, the type of protective equipment that is required, and the proper decontamination procedures. **1. Reports to gate house.** **2. Points out available advice on possible chemical or vapor exposures and recommends proper protective equipment for fire fighting, spill clean-up and decontamination.**
Head Count Coordinator; Lab Operator	The Head Count Coordinator is responsible for the "head count" procedure and reports the names of the persons who are accounted for. It is important that the "head count" be completed quickly because a few minutes could be critical for a missing or injured person. **1. Reports to gate house.** **2. Responsible for site head count and reports the results to Site Supervisor.**

Person	**Responsibility**
Communications and Public Affairs; Scott Landis Alternate/Designate - Scott Loper	Responsibility of maintaining plant communications and of releasing information to the public and news media. He/she is responsible for coordinating contacts with families of injured or deceased employees and make sure this is done before the victims' names are released to the news media. To accomplish this, he/she must maintain accurate records of the names and addressed of employees. He is responsible for providing food, clothing and shelter for employees who stay at the site for an extended period of time. **1. Reports to gate house** **2. Responsible for keeping outside telephone lines open** During power failures, the following phones are the emergency stations for incoming and outgoing calls: Gate House 478-1211 Site Supervisor office 478-4782 (outside) 470-1782 For specific information on how to deal with the press, see section ''H'' of this procedure.

G. CALL-IN PROCEDURE FOR OFF SHIFTS

When a fire alarm sounds on the night shift the Head Count Coordinator will start the call-in list. The phone in the guardhouse is programmed so that disaster control personnel can be called by only dialing two numbers. The emergency call-in list is shown below:

Toledo Fire Department / Rescue Squad	911	
Site Supervisor	(734) 384-0344	**Scott R. Landis**
Alt. Site Supervisor	(419) 861-0887	**Scott Loper**
Protection Coordinator	(734) 384-0344	**Scott R. Landis**
Special Hazards Coordinator		Rodney Maier
Communications / Public Affairs Coordinator		**Scott Landis**
Alt. Communications / Public Affairs Coordinator		**Joseph Campbell**
Mt. Clemens Site Manager	586-468-9001	**Joseph Campbell**
Mt. Clemens Environmental Resource	586-468-9323	**Rodney Maier**

H. DEALING WITH THE NEWS MEDIA

1. THE PLANT SPOKESPERSON

The Site Supervisor/Designate will handle all contacts with the media including information, bulletins, photographs, etc. He/she may provide background information or a general statement about a situation, but, news releases will be issued by and/or in the name of the site supervisor.

News media contacts may be made by telephone and should be forwarded to the Site Supervisor. If news personnel appear at the site, they should not be allowed on site, and the Site Supervisor called to the gatehouse to communicate with them at the earliest opportunity.

2. CORPORATE NOTIFICATION.

The Public Affairs Department should be informed of an incident immediately after Mt. Clemens Departmental Management has been informed. Assistance from the Automotive Public Affairs department is available at all times. Any matters that could have significant implications for or effect on the corporation should be forwarded through the DPC departmental management to the Vice President of External Affairs and General Counsel prior to releasing to the news media.

VIII. ATTACHMENTS

Appendix A - Alarm Box Locations
Appendix B - Emergency Equipment List & Locations
Appendix C - SITE DRAWING - EVACUATION ROUTE, RALLY POINT, EMERGENCY KIT

XI. REFERENCES

Axalta Toledo EHS Procedures
Integrated Contingency Plan

Appendix A;

AXALTA FIRE ALARM POINT LIST

SYS # H440236525

Back Up U682108718

Point #	Type	Desription	Test Date/Time	Tester
001	SMK	BLDG 48 OFFICE		
002	SMK	BLDG 48 PHONE RM		
003	SMK	BLDG 48 LUNCH ROOM		
004	SMK	BLDG 48 DUCT SMK		
005	SMK	CONTRL RM CAB 3		
006	SMK	GUARD HOUSE CAB 2		
011	HEAT	BLDG 48 TRANS. RM		
012	HEAT	BOILER HOUSE S.		
013	HEAT	BOILER HOUSE S. CENTER		
014	HEAT	BOILER HOUSE N. CENTER		
015	HEAT	BOILER HOUSE N.		
016	HEAT	LAB CAB 7		
017	HEAT	BOILER HOUSE PANEL		
018	HEAT	CAB 6 WHSE 55 PANEL		
019	HEAT	CAB 5 PANEL		
021	PULL	BLDG 48 OFFICE N.		
022	PULL	BLDG 48 LUNCH RM S.W.		
023	PULL	BLDG 48 LUNCH RM N.W.		
024	PULL	BLDG 48 TRANS. RM		
025	PULL	W. N. 1F		
026	PULL	E. N. TEFLON		
027	PULL	RESIN STOR		
028	PULL	ANSUL DRUM FILL		
029	PULL	N. OLD DOCK		
030	PULL	OLD SHIP DOCK S.		
031	PULL	BLDG 55 OFFICE S.		
032	PULL	TANK FARM S.		
033	PULL	WHSE W. DR		
034	PULL	WHSE N.W. DR		
035	PULL	WHSE N.E. DR		
036	PULL	WHSE E. DR		
037	PULL	WHSE S.E. DR		
038	PULL	FILL STA. N. TANK FARM		
039	PULL	SERVICE GARAGE		
040	PULL	VAZO BLDG		
041	PULL	PEROXIDE BLDG		

042	PULL	WHSE S.W. BY OFFICE ENT
043	PULL	1G ALLEY @ TANK RM 1E
044	PULL	1G ALLEY S.
045	PULL	1G ALLEY N.
046	PULL	3RD FLR RESIN
047	PULL	2ND FLR REACTOR 7 CONT RM
048	PULL	FORK TRUCK SHOP E.
049	PULL	WELD SHOP
050	PULL	FORK TRUCK SHOP W.
051	PULL	BLDG 44 E.
052	PULL	RESIN BSMT S.
053	PULL	BLDG 44 W.
054	PULL	BLDG 44 S.
055	PULL	WEST DOCK S.
056	PULL	RESIN R1 W.
057	PULL	RESIN R2 W.
058	PULL	RESI N R1 MEZZ.
059	PULL	WEST DOCK N.
060	PULL	2ND FLR RESIN R2
061	PULL	INSIDE S. BOILER HOUSE
062	PULL	BLDG 63 NEWPUMP HOUSE
063	PULL	BOILER HOUSE S. EXT.
064	PULL	BOILER HOUSE N.E. EXT.
065	PULL	BOILER HOUSE E. EXT.
066	PULL	BOILER HOUSE N. EXT.
067	PULL	BOILER HOUSE S.E. EXT.
068	PULL	DOW THERM E.
069	PULL	COLD STORAGE E.
070	PULL	DOW THERM W.
071	PULL	COLD STORAGE W.
072	PULL	COLD STORAGE N.
073	PULL	CONT. CLEAN E.
074	PULL	NORTHEND SHOP 1
075	PULL	NORTHEND SHOP 2
076	PULL	OUTSIDE CONT. CLEAN W.
077	PULL	REACTOR 7 SOUTH
078	PULL	OUTSIDE SOLVENT REC.
079	PULL	OURSIDE DOW THERM
080	PULL	REACTOR 7 NORTH
081	PULL	REACTOR 7 3RD FLR
082	PULL	REACTOR 7 2ND FLR
083	PULL	T/W SHED
130	WF	RISER RM T/W SHED
131	WF	RESIN TANK RM
132	WF	OLD SHIP DOCK S.

TOLEDO FIRE EXTINGUISHER LOCATION LIST

Main Break Room/Office	3-1	10# CO2	04-9	CO2	Main breaker room
Main Break Room/Office	3-1	20#ABC	05-9	ABC	Cafeteria Fridge
Main Break Room/Office	3-1	FE36	05-9	FE36	Office Hallway
Main Break Room/Office	3-1	FE36	05-9	FE36	Northeast wall of garage
Main Break Room/Office	3-1	PK	05-20	Purple K	Outside northeast door
Main Break Room/Office	3-1	FE36	05-9	FE36	Inside west door
Main Break Room/Office	3-1	FE36	05-9	FE36	Store room 2nd floor
Main Break Room/Office	3-1	FE36	05-9	FE36	By desk in store room
Warehouse	55	PK	05-20	Purple K	West Wall
Warehouse	55	PK	05-20	Purple K	West wall
Warehouse	55	PK	05-20	Purple K	West wall
Warehouse	55	PK	05-20	Purple K	West wall
Warehouse	55	PK	05-20	Purple K	H row west end
Warehouse	55	PK	05-20	Purple K	K and L row west end
Warehouse	55	PK	05-20	Purple K	Rack A & B west
Warehouse	55	PK	05-20	Purple K	Rack A&B East
Warehouse	55	PK	05-20	Purple K	East wall by Door
Warehouse	55	PK	05-20	Purple K	Rack G&H East End
Warehouse	55	PK	05-20	Purple K	East wall
Warehouse	55	PK	05-20	Purple K	Rack K&L East End
Warehouse	55	PK	05-20	Purple K	East Wall By Over Head Door
Warehouse	55	PK	05-20	Purple k	South Wall By Over Head Door
Warehouse	55	PK	05	Purple K	South Wall By Desk

Warehouse	55	PK	05	Purple K	Office
Gatehouse	58	FE36	05-9	FE 36	Inside gatehouse
Gatehouse	58	PK	05-20	Purple K	Outside gatehouse
Tankwagon Shed	54-1	PK	05-20	Purple K	On post southend of tankwagon shed
Tankwagon Shed	54-1	PK	05-20	Purple K	On top of platform
Resin Storage Tanks	1-E-1	PK	05-20	Purple K	North wall
Resin Storage Tanks	1-E-1	PK	05-20	Purple K	East wall
Resin Storage Tanks	1-E-1	PK	05-20	Purple K	South wall
Resin Storage Tanks	1-E-1	PK	05-20	Purple K	West wall
Resin Storage Tanks	1-E-1	Co2	09-20	Purple K	Center pumps
Resin Storage Tanks	1-E-1	Co2	09-20	Purple K	Center pumps
Press Room	1-F-1	PK	05-20	Purple K	South wall
Press Room	1-F-1	Co2	09-20	Purple K	By tank 14
Press Room	1-F-1	K-3	05-20	Purple K	West wall
Press Room	1-F-1	K-4	05-20	Purple K	North Wall
Press Room	17-1	PK	09-20	Purple K	Drum Cart
Old Shipping Dock	17-1	PK	05-20	Purple K	By Exit To Lunch Room
Teflon 1st. Floor	17-1	1	20	Purple K	East wall
Teflon 1st. Floor	17-1	PK	20	Purple K	North wall
G Building	1-G-1	K-1	05-20	Purple K	South hallway
G Building	1-G-1	K-3		CO2	By Resin office
G Building	1-G-1		05-20 05-20	Purple K	North hallway
G Building	1-G-1		05-20	Purple K	Hallway Across From Chemical
G Building	1-G-1	K-4	05-20	Purple K	Outside chemical West Dock By Basement Door
G Building	1-G-1	6	08	Foam	Resin spill cart

G Building	1-G-1	7	08	Foam	Resin spill cart
G Building	1-G-1	8	08	Foam	Resin spill cart
G Building	1-G-1	9	08	Foam	Resin spill cart
H Building 1st. Floor Chemical	1-H-1	4	09-10	CO_2	Elec Control Rm C
J Building 1st. Floor Resin Cook	1-J-1	K-1	05-20	Purple K	By Pthalic Door
J Building 1st. Floor Resin Cook	1-J-1		09-10	CO2	By Pthalic Door
J Building 1st. Floor Stairs BY Elevator			05-9	FE-36	By Elevator
J Building 2nd Floor Resin Cook	1-J-2	1	08-15	CO_2	By fire alarm box
JBuilding 2nd Floor Roof			08-15	CO2	B Electrical Rm.
On Wall Outside Dow Heater Rm.			05-20	PURPLE K	Main Isle On Wall
On Wall Outside Dow Heater Rm.			05-20	purple k	Main Isle Across From Basement
Cotton shed	44	K-1	05-20	Purple K	Middle wall
Cotton shed	44	K-2	05-20	Purple K	West wall
Cotton shed	44	3	05-20	Purple K	South wall
K Building Reactor #7 1st. Floor	56-1	1	05-20	Purple K	Center loading platform
K Building Reactor #7 1st. Floor	56-1	2	05-20	Purple K	Center loading platform top
K Building Reactor #7 1st. Floor	56-1	K-5	05-20	Purple K	1st. floor south door
K Building Reactor #7 1st. Floor	56-1	K-6	05-20	Purple K	1st. floor north door
K Building Reactor #7 2nd. Floor	56-2	K-1	05-20	Purple K	North door
K Building Reactor #7 2nd. Floor	56-2	K-2	05-20	Purple K	South wall

K Building Reactor #7 2nd. Floor	56-2	3	05-9	FE36	Control room
K Building Reactor #7 3rd. Floor	56-3	K-1	05-20	Purple K	North wall
K Building Reactor #7 3rd. Floor	56-3	K-2	05-20	Purple K	South wall
K Building Reactor #7 Roof	56-4	1	05-20	Purple K	North stairway
Electrical Shop	5B	K-4	05-20	Purple K	West wall between doors
Electrical Shop	5B	K-5	05-20	Purple K	East wall tank repair
K-Blddg backdock	6B	K-1	05-20	Purple K	Outside UF room
Tote Tank Building	64	K-1	05-20	Purple K	North door outside
Tote Tank Building	64	K-4	05-20	Purple K	East wall Outside door
Boiler House	7-A	K-1	05-20	Purple K	South doorway
Boiler House	7-A	2	09-10	CO_2	Control room F
Boiler House	7-A	K-3	05-20	Purple K	North doorway
Boiler House	7-A	4	09-10	CO_2	Pump pit
Boiler House	7-A	5	09-10	CO_2	Air compressor room
Boiler House	7-A	6	05-20	Purple K	Inert gas room
Boiler House	7-A	K-7	05-20	Purple K	New fire pump room
Boiler House	7-A	K-7		Foam	New fire pump room
Thinner Field Tanks	12	K-2	05-20	Purple K	West side N tank dikes Tk 43
Thinner Field Tanks	12	K-3	05-20	Purple K	Unlaoding platform
Thinner Field Tanks	12	K-4	05-20	Purple K	Cat walk Tk 38
Thinner Field Tanks	12	5	05-20	Purple P	North end underground tanks
Thinner Field Tanks	12	6		CO_2	E control room
Thinner Field Tanks	12	5-11	05-20	Purple K	South end underground tanks
W-10 and W-11	56	K-13	05-20	Purple K	By Gas pump and By Safety Shower
Plant Vehicles	V	12		ABC Dry Chemical	Nissan Disel
Fork Truck Garage	52	K-1	05-20	Purple K	East Wall

Fork Truck Garage	52	2	06-5	ABC Dry Chemical	On welder
Fork Truck Garage	52	K-5	05-20	Purple K	Southwest corner outside
Fork Garage			06-5	ABC Dry Chemical	On Torch Cart
			05-20	Purple K	South East Corner Of Garage
Old Garage Behind Thinner Feild					

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Management
Consultants

ATKEARNEY

September 6, 1990

Mr. Bernie Orenstein
Regional Project Officer
U.S. Environmental Protection Agency
Region V
230 South Dearborn Street
Chicago, Illinois 60604

Reference: EPA Contract No. 68-W9-0040; Work Assignment No. R05-05-10; E.I. DuPont, Toledo, Ohio; EPA I.D. No. OHD005041843; Closeout Work Plan, Revision 1

Dear Mr. Orenstein:

Enclosed please find the revised work plan for the above-referenced work assignment. This revision is to reconcile the final budget and reflects a decrease in the level-of-effort required to complete this project.

All applicable A.T. Kearney conflict of interest avoidance procedures have been adhered to for the proposed firms and staffs.

Also enclosed is a work plan approval sheet which you should sign and return to Allen Pearce.

In order to determine the need for a site health and safety plan, or to prepare such a plan, the Kearney Team may need to obtain additional information from EPA or the facility personnel regarding the potential hazards at this site. If information is not provided to the level of detail required to properly assess potential hazards, A.T. Kearney reserves the right to delay proceeding with the site visit until the information is provided.

In cases where the Kearney Team must delay a site visit due to circumstances outside the Team's control, A.T. Kearney will accommodate the schedule change to the maximum extent possible. However, A.T. Kearney reserves the right to charge EPA for expenses incurred as a direct result of the delay. Any such expenses will be brought to EPA's attention as quickly as possible and will be properly documented.

Please feel free to call me if you have any questions.

Sincerely,

Ann L. Anderson

Ann L. Anderson
Technical Director

cc: A. Pearce, EPA OSW
C. Chase, EPA Contracts
S. Bouchard, EPA Region V
A. Glazer
L. Poe
P. Martz
P. Davol
P. Williams
A. Williams
M. Ritter
W. Rohrer, DPRA

bjm\WP51\R050510.WP

CLOSEOUT WORK PLAN

E.I. DU PONT
TOLEDO, OHIO
PRELIMINARY REVIEW/VISUAL SITE INSPECTION REPORT
EPA I.D. NO. OHD005041843

Submitted by:

A.T. Kearney, Inc.
222 South Riverside Plaza
Chicago, Illinois 60606

Submitted to:

Mr. Bernie Orenstein
U.S. Environmental Protection Agency
Region V
230 South Dearborn Street
Chicago, Illinois 60604

In response to:

EPA Contract No. 68-W9-0040
Work Assignment No. R05-05-10

September 6, 1990

EPA Contract No. 68-W9-0040
Work Assignment No. R05-05-10
E.I. DuPont
Toledo, Ohio
PR/VSI Report
EPA I.D. No. OHD005041843

Work Plan Revision No. 1
September 6, 1990

Regional Work Plan Approval

I have reviewed the attached work plan and find it meets our criteria for technical accuracy and properly reflects the scope of work and intended use of the deliverable(s), as described in the work assignment. The projected cost, staff hour estimates, and labor mix are also acceptable.

APPROVAL:

_____ _____
EPA Regional Project Officer Date

APPROVAL:

_____ _____
EPA Headquarters Project Officer Date

APPROVAL:

_____ _____
EPA Contracting Officer Date

CONCURRENCE:

_____ _____
A.T. Kearney Program Director Date

EPA Contract No. 68-W9-0040
Work Assignment No. R05-05-10
E.I. DuPont
Toledo, Ohio
PR/VSI Report
EPA I.D. No. OHD005041843

Work Plan Revision No. 1
September 6, 1990

E.I. DU PONT
TOLEDO, OHIO
PRELIMINARY REVIEW/VISUAL SITE INSPECTION REPORT

WORK TO BE PERFORMED

The Kearney Team will conduct a Preliminary Review/Visual Site Inspection (PR/VSI) of the E.I. DuPont Toledo Paint Plant, Toledo, Ohio (EPA I.D. No. OHD005041843). The facility manufactures intermediate and finished product finishes for automobiles and truck parts.

PRIMARY INTENDED USE

The purpose of this project is to assist EPA Region V in:

(1) Identifying and gathering information on releases at the facility;

(2) Evaluating solid waste management units (SWMUs) and other areas of concern (AOCs) for release potential to all media;

(3) Making preliminary determination regarding releases of concern and the need for further actions and interim measures at the facility; and

(4) Screening from further investigations, those SWMUs and other areas of concern that do not present a release potential.

The deliverable will be prepared in a format approved by EPA and suitable for use by EPA in the administrative record for the facility.

PROJECTS AND TASKS

The project will consist of the following tasks:

Task 01 - Prepare a work plan. This will include all preliminary contacts, including the EPA Work Assignment Manager (EPA WAM) and state representative, required for the preparation of the work plan, and file searches at the Ohio EPA and EPA Region V offices.

Files to be reviewed include RCRA, NPDES, CERCLA, and Air Quality, as well as any Solid Waste files and emergency response or spill notifications.

At the request of the EPA WAM, the Kearney Work Assignment Manager (KWAM) will contact the facility to schedule the Visual Site Inspection (VSI).

Task 02 - Conduct a Preliminary Review (PR) of the existing file material to identify the need for additional information, and to provide focus for activities to be conducted during the Visual Site Inspection (VSI) and (if necessary) the Sampling Visit (SV). This task also includes the preparation of a VSI Notification Letter which includes a summary of information needs, and a proposed VSI agenda to be sent to the facility by EPA. At the request of the EPA WAM, the VSI Notification Letter to the facility will be prepared by the EPA WAM. To prepare for the VSI, the Kearney Team will complete a Health and Safety Checklist to identify the activities and potential hazards at the site. The Health and Safety Checklist will be reviewed for approval by the Kearney Health and Safety Director, who will determine if the checklist is adequate or a site-specific Health and Safety Plan is necessary.

Task 03 - Prepare for and conduct the VSI. Prior to the VSI, the Kearney Team will discuss the agenda and goals of the VSI with the EPA WAM. The objectives of the VSI will include the following:

- Verify the information collected during the PR, including the location and condition of the SWMUs and AOCs;
- Identify any additional SWMUs and AOCs;
- Verify and obtain factual information to characterize properly all SWMUs and AOCs. Perform visual inspection and document field observations with photographs and field logs.
- Review site information with the facility representative and collect additional information to determine the need for further actions.

- Identify possible future sampling locations as appropriate; however, development of a sampling plan and performance of a sampling visit are not included within the scope of this work assignment.

This task includes preparation of the field equipment to be used during the VSI.

Task 04 - Prepare a PR/VSI report including all information important to determining the presence or absence of past releases and the potential for continuing releases.

Task 98 - Perform a quality control review of the draft deliverables.

Task 99 - Provide management oversight for the project.

HEALTH AND SAFETY PLAN

In preparing for the site visit, the Kearney Team will complete a site-specific checklist to identify the activities and potential hazards at the site. Information to complete the checklist will be obtained from the Regional Project Officer, EPA WAM and/or other EPA staff who are knowledgeable about the site, and from the facility contact.

After the checklist has been completed, a determination will be made by the A.T. Kearney Health and Safety Director regarding the need for a health and safety plan for the site visit based on the anticipated hazards at the site. In cases where a health and safety plan is required, the Kearney Team will develop a specific plan for the site and amend the work plan to include an additional task to provide for resources for plan development. In cases where no health and safety plan is required (i.e., minimal hazard potential), the Kearney Team will follow health and safety procedures as outlined in the Kearney Staff Protocol for site visits.

MONTHLY PROGRESS REPORT

Information regarding the status of this project will be included in the monthly progress reports A.T. Kearney, Inc. provides to EPA. The information will address:

- Work completed to date,
- Difficulties encountered and remedial action taken,
- Anticipated activity during the subsequent reporting period, and
- Sufficiency of authorized dollars and hours to complete the project.

QUALITY CONTROL PLAN

The Kearney Team Work Assignment Manager (KWAM) will conduct milestone checks on each task. In addition, draft project deliverables will be reviewed by a senior technical staff member of Kearney/Centaur, a Division of A.T. Kearney, Inc. to ensure quality and consistency with EPA regulations and policy.

STAFFING AND MANAGEMENT

Steven Heikkila of DPRA, Inc. will serve as the Kearney Team Work Assignment Manager (WAM).

Individual staff responsibilities are shown in Attachment I. The proposed staffing and task assignments for the project are shown in Attachment II. Hour allocations are shown for each task.

All applicable conflict of interest (COI) avoidance procedures have been adhered to for the proposed firms and staffs.

PERFORMANCE SCHEDULE

The project will be conducted according to the schedule shown in Attachment III.

COST ESTIMATE

The estimated cost for completing this project is included as Attachment IV.

BASIS FOR PERFORMANCE EVALUATION

The measures for evaluation of work assignment performance are described for each of the following performance criteria: technical quality; compliance with schedule; compliance with budget; management; and editorial quality. Measures for each of these criteria are discussed and agreed upon by the RPO and the Kearney Team WAM during the assignment planning process. To the extent possible, clear, quantitative measures will be established.

EPA Contract No. 68-W9-0040
Work Assignment No. R05-05-10
E.I. DuPont
Toledo, Ohio
PR/VSI Report
EPA I.D. No. OHD005041843

Work Plan Revision No. 1
September 6, 1990

ATTACHMENT I

STAFF RESPONSIBILITY CHART

STAFF	ROLE	AREAS OF RESPONSIBILITY
A. Anderson	Technical Director	Management oversight
A. Williams	Technical Assistant	Administrative support, to the Technical Director such as: perform COI checks, assemble and edit work plans, project tracking, general completeness review of deliverables, and distribute documents
S. Heikkila	Kearney Team Work	Day-to-day management Assignment Manager
P. Martz	Regional Liaison	Initiate work, monitor project planning and implementation, and conduct project performance evaluation
W. Rohrer	Technical Staff	Project plan development, PR, VSI, PR/VSI Report
A. Luebeck	Technical Staff	PR, Health and Safety Plan, VSI, PR/VSI Report
B. Blackburn	Technical Staff	PR/VSI Report
L. Axe	Technical Staff	Conduct state file search
P. Williams	Health & Safety Director	Review Health & Safety Checklist
P. Davol	Quality Control Reviewer	Senior-level technical review of final deliverable

EPA Contract No. 68-W9-0040
Work Assignment No. R05-05-10
E.I. DuPont
Toledo, Ohio
PR/VSI Report
EPA I.D. No. OHD005041843

Work Plan Revision No. 1
September 6, 1990

ATTACHMENT II

STAFFING

STAFF			TASK						
Name	1/ Firm	2/ Labor Category	01	02	03	04	3/ 98	4/ 99	TOTAL
Technical Director			6					12	8
A. Anderson	ATK	P4	4	-	-	-	-	9	13
Work Assignment Manager								12	12
S. Heikkila	DPRA	P3	-	-	-	-	-	10	10
Staffing									
P. Martz	ATK	P2	2	-	-	-	-	2	4 2
L. Axe	ATK	P3	6 7	-	-	-	-	-	6 7
A. Williams	ATK	T2	8	-	-	-	-	12	20
Tech. Support	ATK		4	-	-	-	-	4	8
P. Williams	K/C	P4	-	2	-	-	-	-	2
W. Rohrer	DPRA	P4	8	24 20	24 20	16 10	-	-	72 58
A. Luebeck	DPRA	P2	-	20 28	16 20	104 130	-	-	140
B. Blackburn	DPRA	P1	-	-	-	12	-	-	12 20
Tech. Support	DPRA		-	8 6	-	32 24	-	-	40 30
Quality Control									
P. Davol	K/C	P4	-	-	-	-	12	-	12
TOTALS			32	54	40	164	12	35	337

1/ ATK = A.T. Kearney, Inc.
K/C = Kearney/Centaur, a Division of A.T. Kearney, Inc.
DPRA = DPRA, Incorporated

2/ Provides Labor Classification for Each Staff Person (e.g., P4, P3)

3/ Task 98 = Quality Control

4/ Task 99 = Project Management

ATTACHMENT III

SCHEDULE

Task	Milestone #	Description	Scheduled Date
01	01	Prepare work plan Prepare work plan Revision 1	01/16/90 09/06/90
02	02	Conduct Preliminary Review	01/15/90
02	03	Submit health and safety checklist to Health and Safety Director for review	01/15/90
02	04	Health and Safety Director provides comments on health and safety checklist, determines whether a site-specific health and safety plan is needed	01/16/90
03	05	Discuss prelimimary SWMU list with EPA WAM	01/16/90
02	06	Submit VSI Notification Letter to EPA	01/16/90
03	07	Conduct VSI	Week of 01/22/90
04	08	Submit draft PR/VSI Report to QC	02/22/90
04	09	Submit QC comments to KWAM	03/01/90
04	10	Submit PR/VSI report to TD	03/08/90
04	11	Submit PR/VSI report to EPA WAM	03/15/90
99	12	Project management	In accordance with above milestones

ATTACHMENT IV-A

TRAVEL TABLE

Total Trips	Total People	(1) From/To	Total Train/ Air Fare	Total Days	(2) Total Hotel	(2) Total Meals	Rental Car	(3) Total Local Travel	(4) Total Cost
1	2	Mnpls/Toledo	1080	4	200	104	130	--	1514
1	1	Dayton/Toledo	70	1	20	15	30	5	140
TOTAL			1150		220	119	160	5	1654

NOTES

(1) All trips are roundtrip unless otherwise specified.

(2) Estimates for hotel and meals are based on allowable per diem rates for the destination city. The estimates are calculated from the total days (e.g., 2 days in Boston, Hotel - 2 x $81; Meals - 2 x $34).

(3) Local travel includes cab fare, public transportation, mileage, parking and tolls.

(4) In cases of file searches, Regional meetings, etc., travel costs may be divided among several projects; therefore, only a portion of the costs will be shown for each project.

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EPA Contract No. 68-W9-0040
Work Assignment No. R05-05-10
E.I. DuPont
Toledo, Ohio
PR/VSI Report
EPA I.D. No. OHD005041843

Work Plan Revision No. 1
September 6, 1990

ATTACHMENT IV-B

ESTIMATED COST

		Hours	Cost
A.T. Kearney, Inc.			
Labor		63	$ 2,470
Other Direct Costs			
Supplies (paper, pens, file folders, etc.)	$122		
Office Support Labor	81		
Photocopy	122		
Postage/Delivery	203		
Telephone/FAX	162		
Misc. Expense (computer leases, off-site file storage, subcontract administration, etc.)	122		
Total ODC Costs			$ 812
Subtotal			$ 3,282
DPRA, Inc.			
Labor		274	$11,704
Fee			962
Travel			1,793
Other Direct Costs			
Office Support Labor	$ 5		
Supplies	20		
Photocopy	20		
Postage/Delivery	80		
Telephone/FAX	20		
Misc. Expense (Photos)	100		
Total ODC Costs			$ 245
Subtotal			$14,704
SUBTOTAL			$17,986

ATTACHMENT IV-B (Cont'd)

ESTIMATED COST

A.T. Kearney, Inc.

Fee - 3% Base		$ 540
3% Award		540
Subtotal		$ 1,080
TOTAL ESTIMATED COST	337	$19,066

AVERAGE LABOR COST
PER HOUR FOR ALL FIRMS $42.06

WORK PLAN AVERAGE HOURLY RATE $56.58

January 5, 1990

Mr. Joseph C. Hammond
Senior Engineer
E. I. DuPont DeNemours and Company
P.O. Box 953
Toledo, Ohio 43695

Dear Joe:

Please be advised that recent test data we obtained from sampling your company's total effluent on December 20, 1989 (sampled at end of pipe) indicates compliance with all parameters tested under Chapter 930, City of Toledo Discharge Standards.

If you have any questions concerning final compliance with "Discharge Standards," please contact me.

Very truly yours,

Edward M. Racz

Edward M. Racz
Senior Environmental Specialist

EMR:mg/f

cc: Lee Pfouts, Chief, Water Resources
Thomas A. Doktor, Industrial Waste Control Specialist

DPRA E-1500 First National Bank Building, St. Paul, Minnesota 55101 Telephone 612-227-6500

January 15, 1990

Mr. Bernie Orenstein
Regional Project Officer
U.S. Environmental Protection Agency
Region V
230 South Dearborn
Chicago, Illinois 60604

Reference: EPA Contract No. 68-W9-0040; Work Assignment No. R05-05-10; E.I. Dupont Toledo, Ohio; EPA ID No. OHD005041843; Visual Site Inspection Notification Deliverable

Dear Mr. Orenstein:

Enclosed please find the Visual Site Inspection (VSI) Notification Letter and proposed Agenda and Information Needs List for the E.I. Dupont Toledo Paint Plant. The VSI is scheduled for January 22-23, 1990.

Should you have any questions or require additional information, please feel free to contact me.

Sincerely,

William L. M. Rohrer

William L. M. Rohrer
Work Assignment Manager

WLMR/kge
Enc

cc: S. Bouchard, USEPA Region V
A. Anderson
A. Glazer
J. Grieve
M. Greenwood
A. Williams (w/o attachment)

200 Research Drive P.O. Box 727 Manhattan, Kansas 66502 Telephone 913-539-3565 Telex 704314
Other offices: Washington, D.C., St. Paul, Chicago, Denver, Dallas, Kansas City, Oak Ridge, Kisumu, Kenya

A.T. Kearney, Inc.
222 South Riverside Plaza
Chicago, Illinois 60606
312 648 0111
Facsimile 312 648 1939-2302

Management
Consultants

A.T. KEARNEY

January 16, 1990

Mr. Bernie Orenstein
Regional Project Officer
U.S. Environmental Protection Agency
Region V
230 South Dearborn Street
Chicago, Illinois 60604

Reference: EPA Contract No. 68-W9-0040; Work Assignment No. R05-05-10; E.I. DuPont, Toledo, Ohio; EPA I.D. No. OHD005041843; Work Plan

Dear Mr. Orenstein:

Enclosed please find the proposed work plan which you requested for the above-referenced work assignment. This work plan calls for the Kearney Team to conduct a RCRA Facility Assessment (RFA) at the E.I. DuPont facility in Toledo, Ohio. The level of effort and budget is based upon a preliminary estimate of 40 - 50 solid waste managements units (SWMUs) at the facility.

All applicable A.T. Kearney conflict of interest avoidance procedures have been adhered to for the proposed firms and staffs.

Also enclosed is a work plan approval sheet which you should sign and return to Allen Pearce. In accordance with the procedures for this contract, if the Contracting Officer has not provided written approval of this work plan by February 14, 1990, A.T. Kearney will stop work on this project. In these cases, A.T. Kearney will not resume work until the Contracting Officer approves the work plan.

In order to determine the need for a site health and safety plan, or to prepare such a plan, the Kearney Team may need to obtain additional information from EPA or the facility personnel regarding the potential hazards at this site. If information is not provided to the level of detail required to properly assess potential hazards, A.T. Kearney reserves the right to delay proceeding with the site visit until the information is provided.

In cases where the Kearney Team must delay a site visit due to circumstances outside the Team's control, A.T. Kearney will accommodate the schedule change to the maximum extent possible. However, A.T. Kearney reserves the right to charge EPA for expenses incurred as a direct result of the delay. Any such expenses will be brought to EPA's attention as quickly as possible and will be properly documented.

Please feel free to call me or Steven Heikkila, the Kearney Team Work Assignment Manager (who can be reached at 612/227-6500), if you have any questions.

Sincerely,

Ann L. Anderson

Ann L. Anderson
Technical Director

cc: A. Pearce, EPA OSW
C. Chase, EPA Contracts
S. Bouchard, EPA Region V
A. Glazer
L. Poe
L. Axe
P. Martz
P. Davol
P. Williams
A. Williams
M. Ritter
W. Rohrer, DPRA

3660E

PROPOSED WORK PLAN

E.I. DU PONT
TOLEDO, OHIO
PRELIMINARY REVIEW/VISUAL SITE INSPECTION REPORT
EPA I.D. NO. OHD005041843

Submitted by:

A.T. Kearney, Inc.
222 South Riverside Plaza
Chicago, Illinois 60606

Submitted to:

Mr. Bernie Orenstein
U.S. Environmental Protection Agency
Region V
230 South Dearborn Street
Chicago, Illinois 60604

In response to:

EPA Contract No. 68-W9-0040
Work Assignment No. R05-05-10

January 16, 1990

EPA Contract No. 68-W9-0040
Work Assignment No. R05-05-10
E.I. DuPont
Toledo, Ohio
PR/VSI Report
EPA I.D. No. OHD005041843

Work Plan Revision No. 0
January 16, 1990

Regional Work Plan Approval

I have reviewed the attached work plan and find it meets our criteria for technical accuracy and properly reflects the scope of work and intended use of the deliverable(s), as described in the work assignment. The projected cost, staff hour estimates, and labor mix are also acceptable.

APPROVAL:

_____ _____
EPA Regional Project Officer Date

APPROVAL:

_____ _____
EPA Headquarters Project Officer Date

APPROVAL:

_____ _____
EPA Contracting Officer Date

CONCURRENCE:

_____ _____
A.T. Kearney Program Director Date

E.I. DU PONT
TOLEDO, OHIO
PRELIMINARY REVIEW/VISUAL SITE INSPECTION REPORT

WORK TO BE PERFORMED

The Kearney Team will conduct a Preliminary Review/Visual Site Inspection (PR/VSI) of the E.I. DuPont Toledo Paint Plant, Toledo, Ohio (EPA I.D. No. OHD005041843). The facility manufactures intermediate and finished product finishes for automobiles and truck parts.

PRIMARY INTENDED USE

The purpose of this project is to assist EPA Region V in:

(1) Identifying and gathering information on releases at the facility;

(2) Evaluating solid waste management units (SWMUs) and other areas of concern (AOCs) for release potential to all media;

(3) Making preliminary determination regarding releases of concern and the need for further actions and interim measures at the facility; and

(4) Screening from further investigations, those SWMUs and other areas of concern that do not present a release potential.

The deliverable will be prepared in a format approved by EPA and suitable for use by EPA in the administrative record for the facility.

PROJECTS AND TASKS

The project will consist of the following tasks:

Task 01 - Prepare a work plan. This will include all preliminary contacts, including the EPA Work Assignment Manager (EPA WAM) and state representative, required for the preparation of the work plan, and file searches at the Ohio EPA and EPA Region V offices.

Files to be reviewed include RCRA, NPDES, CERCLA, and Air Quality, as well as any Solid Waste files and emergency response or spill notifications.

At the request of the EPA WAM, the Kearney Work Assignment Manager (KWAM) will contact the facility to schedule the Visual Site Inspection (VSI).

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- Verify the information collected during the PR, including the location and condition of the SWMUs and AOCs;
- Identify any additional SWMUs and AOCs;
- Verify and obtain factual information to characterize properly all SWMUs and AOCs. Perform visual inspection and document field observations with photographs and field logs.
- Review site information with the facility representative and collect additional information to determine the need for further actions.

- Identify possible future sampling locations as appropriate; however, development of a sampling plan and performance of a sampling visit are not included within the scope of this work assignment.

This task includes preparation of the field equipment to be used during the VSI.

Task 04 - Prepare a PR/VSI report including all information important to determining the presence or absence of past releases and the potential for continuing releases.

Task 98 - Perform a quality control review of the draft deliverables.

Task 99 - Provide management oversight for the project.

HEALTH AND SAFETY PLAN

In preparing for the site visit, the Kearney Team will complete a site-specific checklist to identify the activities and potential hazards at the site. Information to complete the checklist will be obtained from the Regional Project Officer, EPA WAM and/or other EPA staff who are knowledgeable about the site, and from the facility contact.

After the checklist has been completed, a determination will be made by the A.T. Kearney Health and Safety Director regarding the need for a health and safety plan for the site visit based on the anticipated hazards at the site. In cases where a health and safety plan is required, the Kearney Team will develop a specific plan for the site and amend the work plan to include an additional task to provide for resources for plan development. In cases where no health and safety plan is required (i.e., minimal hazard potential), the Kearney Team will follow health and safety procedures as outlined in the Kearney Staff Protocol for site visits.

MONTHLY PROGRESS REPORT

Information regarding the status of this project will be included in the monthly progress reports A.T. Kearney, Inc. provides to EPA. The information will address:

- Work completed to date,
- Difficulties encountered and remedial action taken,
- Anticipated activity during the subsequent reporting period, and
- Sufficiency of authorized dollars and hours to complete the project.

QUALITY CONTROL PLAN

The Kearney Team Work Assignment Manager (KWAM) will conduct milestone checks on each task. In addition, draft project deliverables will be reviewed by a senior technical staff member of Kearney/Centaur, a Division of A.T. Kearney, Inc. to ensure quality and consistency with EPA regulations and policy.

STAFFING AND MANAGEMENT

Steven Heikkila of DPRA, Inc. will serve as the Kearney Team Work Assignment Manager (WAM).

Individual staff responsibilities are shown in Attachment I. The proposed staffing and task assignments for the project are shown in Attachment II. Hour allocations are shown for each task.

All applicable conflict of interest (COI) avoidance procedures have been adhered to for the proposed firms and staffs.

PERFORMANCE SCHEDULE

The project will be conducted according to the schedule shown in Attachment III.

COST ESTIMATE

The estimated cost for completing this project is included as Attachment IV.

BASIS FOR PERFORMANCE EVALUATION

The measures for evaluation of work assignment performance are described for each of the following performance criteria: technical quality; compliance with schedule; compliance with budget; management; and editorial quality. Measures for each of these criteria are discussed and agreed upon by the RPO and the Kearney Team WAM during the assignment planning process. To the extent possible, clear, quantitative measures will be established.

ATTACHMENT I

STAFF RESPONSIBILITY CHART

STAFF	ROLE	AREAS OF RESPONSIBILITY
A. Anderson	Technical Director	Management oversight
A. Williams	Technical Assistant	Administrative support, to the Technical Director such as: perform COI checks, assemble and edit work plans, project tracking, general completeness review of deliverables, and distribute documents
S. Heikkila	Kearney Team Work Assignment Manager	Day-to-day management
P. Martz	Regional Liaison	Initiate work, monitor project planning and implementation, and conduct project performance evaluation
W. Rohrer	Technical Staff	Project plan development, PR, VSI, PR/VSI Report
A. Luebeck	Technical Staff	PR, Health and Safety Plan, VSI, PR/VSI Report
B. Blackburn	Technical Staff	PR/VSI Report
L. Axe	Technical Staff	Conduct state file search
P. Williams	Health & Safety Director	Review Health & Safety Checklist
P. Davol	Quality Control Reviewer	Senior-level technical review of final deliverable

ATTACHMENT II

STAFFING

STAFF			TASK						
	1/	2/ Labor					3/	4/	
Name	Firm	Category	01	02	03	04	98	99	TOTAL
Technical Director									
A. Anderson	ATK	P4	6	-	-	-	-	12	18
Work Assignment Manager									
S. Heikkila	DPRA	P3	-	-	-	-	-	12	12
Staffing									
P. Martz	ATK	P2	2	-	-	-	-	2	4
L. Axe	ATK	P3	7	-	-	-	-	-	7
A. Williams	ATK	T2	8	-	-	-	-	12	20
Tech. Support	ATK		4	-	-	-	-	4	8
P. Williams	K/C	P4	-	2	-	-	-	-	2
W. Rohrer	DPRA	P4	8	20	20	10	-	-	58
A. Luebeck	DPRA	P2	-	28	20	130	-	-	178
B. Blackburn	DPRA	P1	-	-	-	20	-	-	20
Tech. Support	DPRA		-	6	-	24	-	-	30
Quality Control									
P. Davol	K/C	P4	-	-	-	-	12	-	12
TOTALS			35	56	40	184	12	42	369

1/ ATK = A.T. Kearney, Inc.
K/C = Kearney/Centaur, a Division of A.T. Kearney, Inc.
DPRA = DPRA, Incorporated

2/ Provides Labor Classification for Each Staff Person (e.g., P4, P3)

3/ Task 98 = Quality Control

4/ Task 99 = Project Management

ATTACHMENT III

SCHEDULE

Task	Milestone #	Description	Scheduled Date
01	01	Prepare work plan	01/16/90
02	02	Conduct Preliminary Review	01/15/90
02	03	Submit health and safety checklist to Health and Safety Director for review	01/15/90
02	04	Health and Safety Director provides comments on health and safety checklist, determines whether a site-specific health and safety plan is needed	01/16/90
03	05	Discuss prelimimary SWMU list with EPA WAM	01/16/90
02	06	Submit VSI Notification Letter to EPA	01/16/90
03	07	Conduct VSI	Week of 01/22/90
04	08	Submit draft PR/VSI Report to QC	02/22/90
04	09	Submit QC comments to KWAM	03/01/90
04	10	Submit PR/VSI report to TD	03/08/90
04	11	Submit PR/VSI report to EPA WAM	03/15/90
99	12	Project management	In accordance with above milestones

ATTACHMENT IV-A

TRAVEL TABLE

Total Trips	Total People	(1) From/To	Total Train/ Air Fare	Total Days	(2) Total Hotel	(2) Total Meals	Rental Car	(3) Total Local Travel	(4) Total Cost
1	2	Minneapolis/Toledo	1080	4	200	104	130	--	1514
1	1	Dayton/Toledo	70	1	20	15	30	5	140
TOTAL			1150		220	119	160	5	1654

NOTES

(1) All trips are roundtrip unless otherwise specified.

(2) Estimates for hotel and meals are based on allowable per diem rates for the destination city. The estimates are calculated from the total days (e.g., 2 days in Boston, Hotel - 2 x $81; Meals - 2 x $34).

(3) Local travel includes cab fare, public transportation, mileage, parking and tolls.

(4) In cases of file searches, Regional meetings, etc., travel costs may be divided among several projects; therefore, only a portion of the costs will be shown for each project.

EPA Contract No. 68-W9-0040
Work Assignment No. R05-05-10
E.I. DuPont
Toledo, Ohio
PR/VSI Report
EPA I.D. No. OHD005041843

Work Plan Revision No. 0
January 16, 1990

ATTACHMENT IV-B

ESTIMATED COST

		Hours	Cost
A.T. Kearney, Inc.			
Labor		71	$ 2,848
ATK Travel and Subsistence			140
Other Direct Costs			
Supplies (paper, pens, file folders, etc.)	$122		
Office Support Labor	81		
Photocopy	122		
Postage/Delivery	203		
Telephone/FAX	162		
Misc. Expense (computer leases, off-site file storage, subcontract administration, etc.)	122		
Total ODC Costs			$ 812
Subtotal			$ 3,800
DPRA, Inc.			
Labor		298	$13,016
Fee			1,279
Travel			1,514
Other Direct Costs			
Office Support Labor	$ 5		
Supplies	20		
Photocopy	20		
Postage/Delivery	80		
Telephone/FAX	20		
Misc. Expense (Photos)	100		
Total ODC Costs			$ 245
Subtotal			$16,054
SUBTOTAL			$19,854

ATTACHMENT IV-B (Cont'd)

ESTIMATED COST

A.T. Kearney, Inc.

Fee - 3% Base		$ 596
3% Award		596
Subtotal		$ 1,192
TOTAL ESTIMATED COST	369	$21,046

AVERAGE LABOR COST
PER HOUR FOR ALL FIRMS $42.99

WORK PLAN AVERAGE HOURLY RATE $57.04

3660E